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Facility ID No. A0586 *PERMIT NO.* AP4911-1502
CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section V. Specific Operating Conditions

A. Emission Unit #S2.001 – Pulverized Coal Fired Utility Boiler. *UTM: North 4,399.588 km, East 691.243 km (Zone 11)*

System 01 – Pulverized Coal-Fired Utility Boiler, 530 MW Output (Nominal)

S2.001 ***Super-Critical Steam Utility Boiler****, Manufacturer TBD, Model # TBD, Serial # TBD, Unit Manufactured TBD. 5,216 million Btu/hr - Maximum Heat Input Rate.*

1. NAC 445B.3405
   Air Pollution Equipment
   a. Emissions from **S2.001** shall be ducted to the following emissions control system with 100% capture and a maximum volume flow rate of 1,256,028 dry standard cubic feet per minute (DSCFM):
      (1) Fabric Filter Baghouse for the control of particulate matter and lead.
      (2) Dry scrubbing system for the control of sulfur dioxide, hydrogen fluoride and sulfuric acid mist.
      (3) Selective Catalyst Reduction (SCR) system for the control of oxides of nitrogen (NO_x). The SCR shall utilize ammonia injection into the SCR at a volume needed to comply with the applicable NO_x emission limits.
      (4) Low-NO_x burners and overfire air shall be utilized to minimize the formation of NO_x during the combustion process.
      (5) Halogenated Activated Carbon injection system for the control of mercury emissions.

   b. Stack Parameters
      Height: 600.0 ft
      Diameter: 22.2 ft
      Exhaust Temperature: 165 ^{o}F
      Velocity: 65.0 ft/sec
      Volume Flow: 1,256,028 DSCFM

2. NAC 445B.3405
   Emission Limits
   a. On and after the date of startup of **S2.001**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.001**, the following pollutants in excess of the following specified limits:
      (1) NAC 445B.305 – The discharge of PM (particulate matter), filterable and condensable, and PM_{10} (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere each will not exceed **198.3** pounds per hour.

      (2) NAC 445B.2203(1)(c) – The discharge of PM_{10}, filterable and condensable, to the atmosphere will not exceed **0.13** pound per million Btu.

      (3) SIP 445.731(1)(c) *Federally Enforceable SIP* – The discharge of PM, filterable and condensable, to the atmosphere will not exceed **0.13** pound per million Btu.

      (4) NAC 445B.305 *BACT Emission Limit* – The discharge of PM and PM_{10}, each, filterable, to the atmosphere will not exceed **0.015** pound per million Btu, based on a rolling 3-hour averaging period.

      (5) 40 CFR Part 60.42Da(c)(1) and (2) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases which contain filterable particulate matter in excess of either: 18 nanograms per Joule (ng/J) (0.14 lb/MWh) gross energy output; or 6.4 ng/J (0.015 lb per million Btu) heat input derived from the combustion of solid, liquid or gaseous fuel.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(6) NAC 445B.22047(3) – The discharge of sulfur to the atmosphere will not exceed **3,129.6** pounds per hour, based on a one-hour average.

(7) Article 8.2.1.2 *Federally Enforceable SIP* - The discharge of sulfur to the atmosphere will not exceed **3,129.6** pounds per hour, based on a one-hour average.

(8) NAC 445B.305 *BACT Emission Limit* – The discharge of SO_2 to the atmosphere will not exceed:

(i) While combusting coal with a Sulfur content equal to or greater than 0.45 percent (rolling 30-day averaging period), based on daily ASTM sampling:

(a) **0.09** pound per million Btu, based on a rolling 24-hour averaging period.

(b) 95% minimum SO_2 removal efficiency will be maintained across the system, based on a rolling 30-day averaging period.

(ii) While combusting coal with a Sulfur content less than 0.45 percent (rolling 30-day averaging period), based on daily ASTM sampling:

(a) **0.065** pound per million Btu, based on a rolling 24-hour averaging period.

(b) 91% minimum SO_2 removal efficiency will be maintained across the system, based on a rolling 30-day averaging period.

(9) NAC 445B.305 – The discharge of SO_2 to the atmosphere will not exceed **462.0** pounds per hour, based on a rolling 3-hour averaging period.

(10) 40 CFR Part 60.43Da(i)(1) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted under Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases that contain sulfur dioxide in excess of either: 180 ng/J (1.4 lb/MWh) gross energy output on a 30-day rolling average basis, or 5 percent of the potential combustion concentration (95 percent reduction) on a 30-day rolling average basis.

(11) NAC 445B.305 *BACT Emission Limit* – The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.07** pound per million Btu, based on a rolling 24-hour averaging period.

(12) NAC 445B.305 – The discharge of NO_x to the atmosphere will not exceed **365.1** pounds per hour, based on a rolling 24-hour averaging period.

(13) 40 CFR Part 60.44Da(e) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted by Sec. 60.8 is completed, no new source owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases that contain nitrogen oxides (expressed as NO_2) in excess of 130 ng/J (1.0 lb MWh) gross energy output based on a 30-day rolling average basis.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(14) NAC 445B.305 *BACT Emission Limit* – The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.15** pound per million Btu, based on a rolling 24-hour averaging period.

(15) NAC 445B.305 – The discharge of CO to the atmosphere will not exceed **782.4** pounds per hour, based on a rolling 24-hour averaging period.

(16) NAC 445B.305 *BACT Emission Limit* – The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.0036** pound per million Btu, based on a rolling 3-hour averaging period.

(17) NAC 445B.305 – The discharge of VOC to the atmosphere will not exceed **18.8** pounds per hour, based on a rolling 3-hour averaging period.

(18) NAC 445B.305 *BACT Emission Limit* – The discharge of Pb (lead) to the atmosphere will not exceed **1.8 x 10^{-5}** pound per million Btu, based on a rolling 3-hour averaging period.

(19) NAC 445B.305 – The discharge of lead to the atmosphere will not exceed **0.092** pound per hour, based on a rolling 3-hour averaging period.

(20) 40 CFR Part 60.45Da(a) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted under §60.8 is completed, ***the Permittee*** shall not cause to be discharged into the atmosphere from **S2.001** any gases which contain mercury (Hg) emissions in excess of of each Hg emissions limit in paragraphs (i) through (iii) below on a 12-month rolling averaging period.

(i) For each coal-fired electric utility steam generating unit that burns only bituminous coal, ***the Permittee*** must not discharge into the atmosphere any gases from a new affected souce which contain Hg in excess of **20 x 10^{-6}** pound per megawatt hour (lb/MWh) or 0.020 lb/gigawatt-hour (GWh) on a gross output basis. The International System of Units (SI) equivalent is 0.0025 nanograms per joule (ng/J).

(ii) For each coal-fired electric utility steam generating unit that burns only sub-bituminous coal, if your unit is located in a county-level geographical area receiving less than or equal to 25 in/yr mean annual precipitation, based on the most recent publicly available U.S. Department of Agriculture 30-year data, ***the Permittee*** must not discharge into the atmosphere any gases from a new affected source which contain Hg in excess of **97 x 10^{-6}** lb/MWh or 0.097 lb/GWh on an output basis. The SI equivalent is 0.0122 ng/J.

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(20) 40 CFR Part 60.45Da(a) *Federally Enforceable New Source Performance Standard Requirement* (Continued)

(iii) For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks (i.e., bituminous coal, sub-bituminous coal), ***the Permittee*** must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the monthly unit-specific Hg emissions limit established according to paragraph A.2.a.(20)(iii)(a) or (iii)(b) below:

(a) ***The Permittee*** must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the computed weighted Hg emissions limit based on the proportion of energy output (in British thermal units, Btu) contributed by each coal rank burned during the compliance period and its applicable Hg emissions limit in paragraphs A.2.a.(20)(i) and (ii) of this section as determined by Equation 1 of this section. ***The Permittee*** must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total Btu or megawatt hours contributed by all fuels burned during the compliance period.

Equation 1: $$EL_b = \frac{\sum_{i=1}^{n} EL_i * HH_i}{\sum_{i=1}^{n} HH_i}$$

Where:
EL_b is the total allowable Hg in lb/MWh that can be emitted to the atmosphere from any affected source being averaged under the blending provision.
EL_i is the Hg emissions limit for the subcategory i (coal rank) that applies to affected source, lb/MWh.
HH_i is the electricity output from **S2.001** during the production period related to use of the corresponding subcategory i (coal rank) that falls within the compliance period, gross MWh generated by **S2.001**.
n is the number of subcategories (coal ranks) averaged for an affected source.

(b) ***The Permittee*** must not discharge into the atmosphere any gases from the unit that contain Hg in excess of the computed weighted Hg emission limit based on the proportion of electricity output (in MWh) contributed by each coal rank burned during the compliance period and its applicable Hg emission limit in paragraphs A.2.a.(20)(i) and (ii) of this section as determined using Equation 1 of this section. ***The Permittee*** must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total megawatt hours contributed by both regulated and non-regulated fuels burned during the compliance period.

(21) NAC 445B.305 – The discharge of mercury to the atmosphere will not exceed **20×10^{-6} lb/MWh**, on a gross output basis, based on a rolling 12-month averaging period.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(22) NAC 445B.305 *BACT Emission Limit* – The discharge of fluorides (expressed as hydrogen fluoride) to the atmosphere will not exceed **9.7×10^{-4}** pound per million Btu, based on a rolling 3-hour averaging period.

(23) NAC 445B.305 – The discharge of hydrogen fluoride to the atmosphere will not exceed **5.04** pounds per hour, based on a rolling 3-hour averaging period.

(24) NAC 445B.305 – The discharge of HCL (hydrogen chloride) to the atmosphere will not exceed **10.8** pounds per hour, based on a rolling 3-hour averaging period.

(25) NAC 445B.305 *BACT Emission Limit* – The discharge of H_2SO_4 (sulfuric acid mist) to the atmosphere will not exceed **0.0034** pound per million Btu, based on a rolling 3-hour averaging period.

(26) NAC 445B.305 – The discharge of sulfuric acid mist to the atmosphere will not exceed **17.7** pounds per hour, based on a rolling 3-hour averaging period.

(27) SIP 445.721 *Federally Enforceable SIP* - The opacity from **S2.001** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.

(28) NAC 445B.22017 – The opacity from **S2.001** will not equal or exceed 20%. The opacity must be determined as set forth in 445B.22017.1(a) or (b). **S2.001** is allowed one 6-minute period per hour of not more than 27 percent opacity as set forth in 40 CFR part 60.42Da(b).

(29) 40 CFR Part 60.42Da(b) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date the particulate matter performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(30) 40 CFR Part 60.48Da(c) *Federally Enforceable New Source Performance Standard Requirement* – The particulate matter emission standards under A.2.a.(5) of this section, the nitrogen oxides emission standards under A.2.a.(13) of this section and the Hg emission standards under A.2.a.(20) of this section apply at all times except during periods of startup, shutdown or malfunction.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

b. NAC 445B.305 BACT Emission Limits During Startup or Shutdown – During periods of startup or shutdown of **S2.001**, ***the Permittee*** shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.001**, the following pollutants in excess of the limits specified in this section. These emission limits apply on a rolling 24-hour average basis during conditions of startup or shutdown. Emissions not occurring during startup or shutdown conditions are excluded from the calculation of 24-hour average emissions for comparison with the startup or shutdown emission limits.

(1) NAC 445B.305 *BACT Emission Limit* – The discharge of SO_2 to the atmosphere will not exceed **1.2** pounds per million Btu.

(2) NAC 445B.305 *BACT Emission Limit* – The discharge of NO_x to the atmosphere will not exceed **0.45** pound per million Btu.

(3) NAC 445B.305 *BACT Emission Limit* – The discharge of CO to the atmosphere will not exceed **0.45** pound per million Btu.

(4) NAC 445B.305 *BACT Emission Limit* – The discharge of VOC to the atmosphere will not exceed **0.01** pound per million Btu. Since VOC is not monitored continuously, the continuously monitored CO emission rate serves as an indicator of combustion efficiency and a surrogate indicator of demonstrating compliance for VOC emissions. Compliance with the CO emission limit in A.2.b.(3) above will constitute compliance with the VOC emission limit in this condition.

(5) NAC 445B.305 *BACT Emission Limit* – The discharge of HF to the atmosphere will not exceed **0.019** pound per million Btu. Since HF is not monitored continuously, the continuously monitored SO_2 emission rate serves as an indicator of dry scrubber performance and a surrogate indicator demonstrating compliance for HF emissions. Compliance with the SO_2 emission limit in A.2.b.(1) above will constitute compliance with the HF emission limit in this condition.

(6) NAC 445B.305 *BACT Emission Limit* – The discharge of H_2SO_4 to the atmosphere will not exceed **0.05** pound per million Btu. Since H_2SO_4 is not monitored continuously, the continuously monitored SO_2 emission rate serves as an indicator of dry scrubber performance and a surrogate indicator demonstrating compliance for H_2SO_4 emissions. Compliance with the SO_2 emission limit in A.2.b.(1) above will constitute compliance with the H_2SO_4 emission limit in this condition.

(7) NAC 445B.305 *BACT Emission Limit* – Since baghouse operation is not affected by startup and shutdown, separate startup and shutdown emission limits for PM, PM_{10}, and Pb are not necessary. During startup and shutdown, ***the Permittee*** shall comply with the PM and PM_{10} emission limits in A.2.a.(4) of this section and the Pb emission limits in A.2.a.(18) of this section.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

3. NAC 445B.3405

Operating Parameters

a. During all periods except startups or shutdowns, **S2.001** will combust coal only. Allowable coal types include sub-bituminous and Western bituminous coals. During startup or shutdown periods, **S2.001** may combust ultra low-sulfur distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight, either alone or in combination with coal.

b. During normal operations (i.e., periods when startups, shutdowns or malfunctions do not occur), the maximum operating heat input rate for **S2.001** will not exceed **5,216** million Btu per any one-hour period. During startup periods when ultra low-sulfur distillate fuel, either alone or in combination with coal is combusted, the maximum operating heat input rate for **S2.001** will not exceed **1,356** million Btu per any one-hour period.

c. **S2.001** may operate a total of 8,760 hours per calendar year.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

a. **Compliance/Performance Testing**

Within 180 days of initial startup or within 60 days of achieving the maximum rate of production at **S2.001**, whichever is sooner, and after 7,000 hours of operation of additional operation following the initial testing, but not greater than 8,760 hours of additional operation after initial testing of **S2.001**, ***the Permittee*** shall:

(1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.001** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch. Compliance with the particulate matter standards contained in A.2.a.(1) through (4) shall be determined by using the dry basis F factor (O_2) procedures in Method 19 to compute the emissions rate. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of 160 ± 14^0C (320 ± 25^0F). For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points (40 CFR Part 60.50Da(b)). The daily coal sampling required in A.4.c.(4) of this section shall be performed during this test.

(2) Conduct and record a Method 201A and 202 performance test for PM_{10} on the exhaust stack of **S2.001** consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in A.4.a.(1) above. All particulate captured in the Method 5 test will be considered PM_{10} for compliance demonstration purposes.

(3) Conduct and record a Method 6 or 6C performance test for SO_2 on the exhaust stack of **S2.001** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C.

(4) Conduct and record a Method 25 or 25A performance test for VOC on the exhaust stack of **S2.001** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25 or 25A.

(5) Conduct and record a Method 29 performance test for Pb on the exhaust stack of **S2.001** consisting of three valid runs. The Method 29 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 29.

(6) Conduct and record a Method 26 performance test for HF and HCl on the exhaust stack of **S2.001** consisting of three valid runs. The Method 26 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 26.

(7) Conduct and record a Method 8 performance test for H_2SO_4 on the exhaust stack of **S2.001** consisting of three valid runs. The Method 8 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 8.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

a. **Compliance/Performance Testing (continued)**

(8) During the testing required in A.4.a.(1) of this section, Method 9 and the procedures in §60.11 shall be used to determine the opacity of the discharge from the exhaust stack of **S2.001.** The Method 9 opacity test must be conducted in accordance with the visible emissions evaluation procedures contained in 40 CFR Part 60, Appendix A, Method 9. A certified visible emissions reader must conduct the visible emissions evaluations for a period of at least 6 minutes. The opacity readings must be averaged such that compliance with both a 6-minute average and 2, 3-minute averages are determined (40 CFR Part 60.50Da(b)(3)).

(9) The performance tests will be conducted at the maximum operating heat input rate limit established in A.3.b. of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. ***The Permittee*** shall make available to the director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard (NAC 445B.252.3).

(10) ***The Permittee*** shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the performance test to allow the director to review the proposed testing procedures (NAC 445B.252.4). The alternative to the reference methods and procedures provided in 40 CFR Part 60.50Da(e) may be utilized to the extent that they are applicable to **S2.001**, and must be identified in the testing procedures as alternative methods.

(11) During each performance test required in A.4.a.(1) through (7) of this section, record the quantity (in tons) of coal combusted during each test run, the heat content value of the coal combusted during each test run (in Btu/ton) and include these data in the test results submitted. The emissions results of the Method 6 performance test for SO_2 must be converted to emissions of sulfur (both lb/hr and lb/MMBtu). The emissions results of the Method 5 or Method 201A and 202 performance test for PM_{10} must be reported in lb/MMBtu.

(12) As a result of the most recent performance test performed in A.4.a.(1) and (2) of this section, derive emission factors for each of the following:

(i) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable and condensable.
(ii) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable only.
(iii) Pounds of PM_{10} per ton of coal (lbs-PM_{10}/tons-coal), filterable and condensable.
(iv) Pounds of PM_{10} per ton of coal (lbs-PM_{10}/tons-coal), filterable only.

These emissions factors will be based on the average of the 3 test runs.

(13) Within 60 days after completing the performance tests and opacity observations contained in A.4.a. of this section, ***the Permittee*** shall furnish the director a written report of the results of the performance tests, the opacity observations and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3689 (NAC 445B.252.8).

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing**

Within 60 days after achieving the maximum production rate at which **S2.001** will be operated, but not later than 180 days after initial startup of **S2.001**, ***the Permittee*** shall:

(1) ***The Permittee*** will comply with the particulate matter standard in §60.42Da(c)(2) and shall demonstrate compliance with such standard according to the requirements in paragraphs (o)(1), (o)(2) and (o)(4) of 40 CFR Part §60.48Da. (§60.48Da(o), Compliance provisions; NSPS requirement). ***The Permittee*** shall:

(i) §60.48Da(o)(1) Conduct an initial performance test according to the requirements of §60.50Da to demonstrate compliance by the applicable date specified in §60.8(a) and thereafter, conduct the performance test **annually**, and

(ii) §60.48Da(o)(2) Use opacity monitoring equipment as an indicator of continuous particulate matter control device performance and demonstrate compliance with §60.42Da(b). In addition, baseline parameters shall be established as the highest hourly opacity averaged during the performance test. If any hourly average opacity measurement is more than 110 percent of the baseline level, the owner or operator will conduct another performance test within 60 days to demonstrate compliance. A new baseline is established during each stack test. The new baseline shall not exceed the opacity limit specified in §60.42Da(b), and

(iii) §60.48Da(o)(4) Install, calibrate, maintain and continuously operate a bag leak detection system according to paragraphs (i) through (viii) of §60.48Da(o)(4).

(2) ***The Permittee*** shall determine compliance with the particulate matter standards in §60.42Da as follows:

(i) §60.50Da(b)(1) The dry basis F factor (O_2) procedures in Method 19 shall be used to compute the emission rate of particulate matter.

(ii) §60.50Da(b)(2) For the particulate matter concentration, Method 5 shall be used.

(iii) §60.50Da(b)(2)(i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (325 ± 25 °F).

(iv) §60.50Da(b)(2)(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points.

(v) §60.50Da(b)(3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(vi) §60.50Da(e) ***The Permittee*** may use the following as alternatives to the reference methods and procedures specified in this section:

(1) §60.50Da(e)(1) For Method 5 or 5B, Method 17 may be used if the stack temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of §§2.1 and 2.3 of Method 5B may not be used in Method 17.

(2) §60.50Da(e)(2) The Fc factor (CO_2) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of §60.46(d)(1). The CO_2 shall be determined in the same manner as the O_2 concentration.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(3) ***The Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percent reduction option under §60.43Da is based on the average emission rates for sulfur dioxide and percent reduction for sulfur dioxide for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percentage reduction option under §60.43Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and a new percent reduction for sulfur dioxide are calculated to show compliance with the applicable standards.

(iii) §60.48Da(g) ***The Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(1) §60.48Da(g)(1) Compliance with applicable 30-day rolling average SO_2 emission limitation is determined by calculating the arithmetic average of all hourly emission rates for SO_2 for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

(2) §60.50Da(g)(2) Compliance with applicable SO_2 percentage reduction requirements is determined based on the average inlet and outlet SO_2 emission rates for the 30 successive boiler operating days.

(iv) §60.48Da(m) ***The Permittee*** shall calculate SO_2 emissions by multiplying the average SO_2 output concentration, measured according to the provisions of §60.49Da(b), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).

(4) As applicable, ***the Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(i) §60.50Da(c)(1) The percent of potential SO_2 emissions ($\%P_s$) to the atmosphere shall be computed using the following equation:

$$\%P_s = [(100 - \%R_f)\ (100 - \%R_g)] / 100$$

Where:
$\%P_s$ = percent of potential SO_2 emissions, percent.
$\%R_f$ = percent reduction from fuel pre-treatment, percent.
$\%R_g$ = percent reduction by SO_2 control system, percent.

(ii) §60.50Da(c)(2) The procedures in Method 19 may be used to determine percent reduction ($\%R_f$) of sulfur by such processes as fuel pre-treatment (physical coal cleaning, hydro-de-sulfurization of fuel oil, etc.), coal pulverizers and bottom and fly ash interaction. This determination is optional.

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(4) As applicable, ***the Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows: (Continued)

(iii) §60.50Da(c)(3) The procedures in Method 19 shall be used to determine the SO_2 percent reduction ($\%R_g$) of any SO_2 control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO_2 control device and the average SO_2 input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.

(iv) §60.50Da(c)(4) The appropriate procedures in Method 19 shall be used to determine the emission rate of SO_2.

(v) §60.50Da(c)(5) The continuous monitoring system in §60.49Da(b) and (d) shall be used to determine the concentrations of SO_2 and CO_2 or O_2.

(5) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average SO_2 emission limitation under §60.43Da is determined by calculating the arithmetic average of all hourly emission rates for SO_2 for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(6) ***The Permittee*** shall determine compliance with the NO_x standards in §60.44Da as follows:

(i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitation under §60.44Da is based on the average emission rates for nitrogen oxides for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitations under §60.44Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for nitrogen oxides is calculated to show compliance with the applicable standards.

(iii) §60.48Da(g) The owner or operator of an affected facility subject to emission limitations in this subpart shall determine compliance as follows:

(1) §60.48Da(g)(1) Compliance with applicable 30-day rolling average NO_x emission limitation is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

(iv) §60.48Da(i) ***The Permittee*** shall calculate NO_x emissions by multiplying the average hourly NO_x output concentration, measured according to the provisions of §60.49Da(c), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).

(7) ***The Permittee*** shall determine compliance with the NO_x standards in §60.44Da as follows:

(i) §60.50Da(d)(1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x.

(ii) §60.50Da(d)(2) The continuous monitoring system in §60.49Da(c) and (d) shall be used to determine the concentrations of NO_x and CO_2 or O_2.

(8) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average NO_x emission limitation under §60.44Da is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown and malfunction.

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures:

(i) §60.50Da(h)(1) The initial performance test shall be commenced by the applicable date specified in §60.8(a). The required continuous monitoring systems must be certified prior to commencing the test. The performance test consists of collecting hourly Hg emission data (lb/MWh) with the continuous monitoring systems for 12 successive months of unit operation (excluding hours of unit startup, shutdown and malfunction). The average Hg emission rate is calculated for each month, and then the weighted, 12-month average Hg emission rate is calculated according to paragraph (h)(2) or (h)(3) of this section, as applicable. If, for any month in the initial performance test, the minimum data capture requirement in §60.49Da(p)(4)(i) is not met, the owner or operator shall report a substitute Hg emission rate for that month, as follows. For the first such month, the substitute monthly Hg emission rate shall be the arithmetic average of all valid hourly Hg emission rates recorded to date. For any subsequent month(s) with insufficient data capture, the substitute monthly Hg emission rate shall be the highest valid hourly Hg emission rate recorded to date. When the 12-month average Hg emission rate for the initial performance test is calculated, for each month in which there was insufficient data capture, the substitute monthly Hg emission rate shall be weighted according to the number of unit operating hours in that month. Following the initial performance test, the owner or operator shall demonstrate compliance by calculating the weighted average of all monthly Hg emission rates (in lb/MWh) for each 12 successive calendar months, excluding data obtained during startup, shutdown, or malfunction.

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average.

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in A.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in A.4.b.(9)(ii)(1)(C) of this section.

(A) §60.50Da(h)(2)(i)(A) If the Hg CEMS measures Hg concentration on a wet basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h$$

Where:

$\mathbf{E_h}$ = Hg mass emissions for the hour, (lb)

$\mathbf{K}$ = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

$\mathbf{C_h}$ = Hourly Hg concentration, wet basis, (µgm/scm)

$\mathbf{Q_h}$ = Hourly stack gas volumetric flow rate, (scfh)

$\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated. For example, $t_h = 0.50$ for a half-hour of unit operation and 1.00 for a full hour of operation.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in A.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in A.4.b.(9)(ii)(1)(C) of this section. (Continued)

(B) §60.50Da(h)(2)(i)(B) If the Hg CEMS measures Hg concentration on a dry basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h * (1 - B_{ws})$$

Where:

$\mathbf{E_h}$ = Hg mass emissions for the hour, (lb)

$\mathbf{K}$ = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

$\mathbf{C_h}$ = Hourly Hg concentration, dry basis, (µgm/dscm)

$\mathbf{Q_h}$ = Hourly stack gas volumetric flow rate, (scfh)

$\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated

$\mathbf{B_{ws}}$ = Stack gas moisture content, expressed as a decimal fraction (*e.g.*, for 8 percent H_2O, $B_{ws} = 0.08$)

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in A.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in A.4.b.(9)(ii)(1)(C) of this section. (Continued)

(C) §60.50Da(h)(2)(i)(C) Use the equation below, to calculate M, the total mass of Hg emitted for the month, by summing the hourly masses derived the equations in A.4.b.(9)(ii)(1)(A) or (B) of this section (as applicable):

$$M = \sum_{h=1}^{n} E_h$$

Where:

M = Total Hg mass emissions for the month, (lb)

$\mathbf{E_h}$ = Hg mass emissions for hour "h", from A.4.b.(9)(ii)(1)(A) or (B)of this section, (lb)

n = The number of unit operating hours in the month with valid CEM and electrical output data, excluding hours of unit startup, shutdown and malfunction

(2) §60.50Da(h)(2)(ii) Calculate the monthly Hg emission rate on an output basis (lb/MWh) using the equation below.

$$ER = \frac{M}{P}$$

Where:

ER = Monthly Hg emission rate, (lb/MWh)

M = Total mass of Hg emissions for the month, from Equation 4, above, (lb)

P = Total electrical output for the month, for the hours used to calculate M, (MWh)

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(3) §60.50Da(h)(2)(iii) Until 12 monthly Hg emission rates have been accumulated, calculate and report only the monthly averages. Then, for each subsequent calendar month, use the equation below to calculate the 12-month rolling average as a weighted average of the Hg emission rate for the current month and the Hg emission rates for the previous 11 months, with one exception. Calendar months in which the unit does not operate (zero unit operating hours) shall not be included in the 12-month rolling average.

$$E_{avg} = \frac{\sum_{i=1}^{12} (ER)_i * n_i}{\sum_{i=1}^{12} n_i}$$

Where:

$\mathbf{E_{avg}}$ = Weighted 12-month rolling average Hg emission rate, (lb/MWh)

$\mathbf{(ER)_i}$ = Monthly Hg emission rate, for month "i", (lb/MWh)

n = The number of unit operating hours in month "i" with valid CEM and electrical output data, excluding hours of unit startup, shutdown, and malfunction

(iii) §60.50Da(h)(3) If a sorbent trap monitoring system is used in lieu of a Hg CEMS, as described in §75.15 of this chapter and in appendix K to Part 75 of this chapter, calculate the monthly Hg emission rates using the equations in A.4.b.(9)(ii)(1)(B) through A.4.b.(9)(ii)(2) of this section, except that for a particular pair of sorbent traps, C_h in the equation in A.4.b.(9)(ii)(1)(B) shall be the flow-proportional average Hg concentration measured over the data collection period.

(iv) §60.50Da(i) Daily calibration drift (CD) tests and quarterly accuracy determinations shall be performed for Hg CEMS in accordance with Procedure 1 of Appendix F to this Part. For the CD assessments, you may either use elemental mercury or mercuric chloride (Hg° or $HgCl_2$) standards. The four quarterly accuracy determinations shall consist of one relative accuracy test audit (RATA) and three measurement error (ME) tests using $HgCl_2$ standards, as described in section 8.3 of Performance Specification 12-A in Appendix B to this Part (note: Hg° standards may be used if the Hg monitor does not have a converter). Alternatively, the owner or operator may implement the applicable daily, weekly, quarterly and annual quality assurance (QA) requirements for Hg CEMS in Appendix B to Part 75 of this chapter, in lieu of the QA procedures in Appendices B and F to this Part. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with Appendices A and B to Part 75 of this chapter, and all other quality assurance requirements specified in Appendix K to Part 75 of this chapter shall be met for sorbent trap monitoring systems.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(10) §60.48Da(l) ***The Permittee*** shall calculate the Hg emission rate (lb/MWh) for each calendar month of the year, using hourly Hg concentrations measured according to the provisions of §60.49Da(p) in conjunction with hourly stack gas volumetric flow rates measured according to the provisions of §60.49Da(l) or (m), and hourly gross electrical outputs, determined according to the provisions in §60.49Da(k). Compliance with the applicable standard under §60.49Da is determined on a 12-month rolling average basis.

(11) ***The Permittee*** shall determine compliance with the opacity standard in 40 CFR §60.42Da(b) via continuous opacity monitoring in accordance with A.4.c.(16) and (17) of this section.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring**

The Permittee, upon startup of **S2.001**, will:

(1) Install, calibrate, operate and maintain mass measurement devices to continuously measure the amount of fuel combusted in **S2.001**. The mass measurement devices must be installed at appropriate locations in the fuel delivery system to accurately and continuously measure the following listed fuels combusted in **S2.001**:

(i) Coal (in tons)

(ii) Distillate Fuel (in pounds)

(2) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the quantities of fuel as measured by the fuel mass measurement devices required in A.4.c.(1) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications.

(3) Perform coal sampling of the coal prior to it entering the boiler. Sampling shall be conducted for moisture, ash, sulfur content and gross calorific value. Coal moisture, ash, sulfur content and gross calorific value will be recorded on 24-hour and 30-day rolling averaging periods. A coal analysis shall be performed daily and the results of these analyses shall be retained for at least two years following the date of the measurement. All sample collection, sample preparation, and analyses performed or caused to be performed shall be conducted according to the methods specified in A.4.c.(4) of this section and in accordance with the coal sampling and analysis plan prepared by WPEA and approved by the BAPC under A.4.c.(4) of this section.

(4) Perform coal sampling as required in A.4.c.(3) of this section according to Section 12.5.3.2.2 in Method 19 in Appendix A to Part 60 and the appropriate ASTM method. The appropriate ASTM methods will be used to determine the coal moisture, ash and sulfur contents. At least 90 days prior to startup of **S2.001**, ***the Permittee*** shall submit a coal sampling and analysis plan to the Nevada Bureau of Air Pollution Control (BAPC), detailing the procedures and equipment that will be used to obtain samples and analyze the coal, including the appropriate ASTM test methods that will be used for each parameter. The BAPC will review the coal sampling and analysis plan and approve the plan or request additional information within 30 days of receipt of the plan.

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(5) Install, calibrate, operate and maintain a SO_2 continuous emissions monitor system (CEMS) (consisting of a SO_2 pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(26) of this section) to continuously measure the concentration of SO_2 (in ppm), percent reduction and SO_2 emission rate (in lb/hr, lb/MMBtu and lb/MWh) from **S2.001**. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.001** to accurately and continuously measure the SO_2 concentrations in **S2.001** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(b), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(6) Determine the removal efficiencies in A.2.a.(8) of this section via the following procedure: (BACT requirement)
(i) SO_2 emissions shall be monitored at the outlet of the SO_2 control device.
(ii) An "as-fired" fuel monitoring system shall be used to determine SO_2 emissions, in accordance with 40 CFR Part 60.49Da(b)(3).
(iii) Percent SO_2 removal shall be calculated on a rolling 30-day averaging period.
(iv) The procedures established in 40 CFR Part 60.49Da(i) shall be used to conduct monitoring system performance evaluations.

(7) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the SO_2 concentration (in ppm), SO_2 percent reduction (including percent reduction as measured in accordance with §60.49Da(b), as applicable, and determined in accordance with A.4.c.(6) of this section) and SO_2 emission rate (in lb/hr, lb/MMBtu and lb/MWh), as measured by the CEMS required in A.4.c.(5) of this section, on a 1-hour, 3-hour, 24-hour and 30-day periods. Percent SO_2 reduction will be determined on a rolling 30-day averaging period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da, 40 CFR Part 60, Appendix B, Performance Specifications, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(8) Divide the results of the 1-hour average for SO_2 emissions (in lb/hr), recorded in A.4.c.(7) of this section, by 2 to obtain the average Sulfur emissions in lb/hour.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(9) Install, calibrate, operate and maintain a NO_x continuous emissions monitor system (CEMS) (consisting of a NO_x pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(26) of this section) to continuously measure the concentration of NO_x (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh) from **S2.001**. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.001** to accurately and continuously measure the NO_x concentration in **S2.001** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(c), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F. If the owner or operator has installed a nitrogen oxides emission rate continuous emission monitoring system (CEMS) to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of §60.49Da(c), except that the owner or operator shall also meet the requirements of §60.51Da. Data reported to meet the requirements of §60.51Da shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter. The procedures established in 40 CFR Part 60.49Da(i) shall be used to conduct monitoring system performance evaluations.

(10) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the NO_x concentration (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh), as measured by the CEMS required in A.4.c.(9) of this section, on a 24-hour, 30-day and 12-month rolling period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(11) Install, calibrate, operate and maintain a continuous monitoring system for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. (40 CFR Part 60.49Da(d))

(12) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored (40 CFR Part 60.49Da(d)). The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267.

(13) Operate the continuous monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR Part 60.49Da(e))

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(14) Obtain emission data from the continuous emission monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide for at least 90 percent of all operating hours for each 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in paragraph §60.49Da(h). (40 CFR Part 60.49Da(f)(2))

(15) Use methods and procedures in §60.49Da(i) to conduct monitoring system performance evaluations under §60.13(c) and calibration checks under §60.13(d) for the continuous emission monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide. Acceptable alternative methods and procedures are given in §60.49Da(j). (40 CFR Part 60.49Da(i))

(16) Install, calibrate, operate and maintain a continuous opacity monitoring system to continuously measure and record the opacity discharged from **S2.001**. The continuous opacity monitoring system will be installed at an appropriate location in the discharge stack of **S2.001** to accurately and continuously measure the opacity of **S2.001** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, and 40 CFR Part 75.10. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.

(17) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the opacity (in percent opacity) as measured by the continuous opacity monitoring system required in A.4.c.(16) of this section on a 3-minute average period and 6-minute average period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, 40 CFR Part 75.10 and 40 CFR Part 75.14.

(18) Install, calibrate, operate and maintain a CO continuous emissions monitor system (CEMS) (consisting of a CO pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(26) of this section) to continuously measure the concentration of CO (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu) from **S2.001**, on a rolling 24-hour averaging period. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.001** to accurately and continuously measure the CO concentration in **S2.001** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(19) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the CO concentration (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu), as measured by the CEMS required in A.4.c.(18) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(20) The owner or operator of an affected facility demonstrating compliance with an Hg limit in §60.45Da shall install and operate a Continuous Emissions Monitoring System (CEMS) to measure and record the concentration of Hg in the exhaust gases from each stack. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.001** to accurately and continuously measure the Hg concentration in **S2.001** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(p) and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(21) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the Hg concentration (in ppm) and Hg emissions rate (in lb/MWh), as measured by the CEMS required in A.4.c.(20) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F .

(22) Within 180 days of initial startup of **S2.001**, ***the Permittee*** will assemble the information required in A.4.c.(24)(i) of this section such that the BAPC can evaluate the percent reductions established for SO_2 in A.2.a.(8)of this Section, based on actual performance of **S2.001**. The percent reductions will be adjusted according to the procedures outlined in A.4.c.(24)(ii) of this Section. ***The Permittee*** will provide the assembled information postmarked within 240 days of initial startup.

(23) ***The Permittee*** will provide the information required in A.4.c.(24)(i) of this section such that BAPC can re-evaluate the percent reductions values established for SO_2 in A.2.a.(8) of this Section within 180 days of any change in the rolling 30-day averaging period fuel sulfur content, as determined in A.4.c.(3) of this section, in excess of ±0.2%. The percent reductions will be adjusted according to the procedures outlined in A.4.c.(24)(ii) of this Section.

(24) Procedure for truing percent reductions values in Section A.2.a.(8) of this Section, as required by A.4.c.(22) or (23).

(i) ***The Permittee*** will provide actual performance of **S2.001** as determined by data gathered by the CEMS and fuel sulfur monitoring for the preceding 180 day period. Data shall consist of:

(a) As fired coal sulfur content on both a 24-hour and 30-day rolling period, as specified in A.4.c.(3) and (4) of this section.

(b) Actual SO_2 percent removal on a rolling 30-day averaging period, using the method specified in A.4.c.(6) of this section.

(c) Actual SO_2 emissions, in pounds per million BTU, on a rolling 24-hour averaging period, using the method specified in A.4.c.(5) of this section.

(ii) Within 60 days of the submittal required in A.4.c.(24)(i), the Bureau of Air Pollution Control (BAPC) will determine the basis to adjust the percent removal efficiencies in A.2.a.(8)(i)(b) and (ii)(b) as follows:

(a) BAPC will increase or decrease the percent SO_2 removal efficiency criteria in A.2.a.(8) of this section if the data show there is greater than a ±1.0% change in the SO_2 removal efficiency.

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(25) The owner or operator of an affected facility with electricity generation shall install, calibrate, maintain and operate a wattmeter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor. (40 CFR § 60.49Da(k)).

(26) Install, certify, operate and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B and procedure 1 of Appendix F of 40 CFR Part 60, and record the output of the system, for measuring the flow of exhaust gases discharged to the atmosphere in accordance with 40 CFR§ 60.49Da(1). Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR §75.21, and validated according to 40 CFR §75.23, may be used. (40 CFR § 60.49Da(m)).

(27) All conversions from Btu/hr unit input to MW unit output must use equivalents found in 40 CFR 60.40(a)(1) for electric utilities. (40 CFR §60.50Da(g)(1)).

(28) Operate the continuous monitoring systems required under 40 CFR Part 60, Subpart Da and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR §60.49Da(e))

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **Recordkeeping**

The Permittee will maintain a contemporaneous log containing at a minimum, the following recordkeeping for each day, or part of a day that **S2.001** is operating:

(1) The total hourly quantity of:

i. Coal (in tons) combusted, for each hour of operation based on the data recorded by the CDCS as required in A.4.c.(2) of this section.

ii. Distillate fuel (in pounds) combusted, for each hour of operation based on the data recorded by the CDCS as required in A.4.c.(2) of this section.

(2) Daily hours of operation:

i. The total daily hours of operation for the corresponding date.

(3) The moisture, ash and sulfur content of the coal, as required in A.4.c.(3) of this section. The average heat content of the coal, in Btu/ton, combusted for the corresponding date. The heat content of the coal will be based on the gross calorific value determined in A.4.c.(3) of this section. The average heat content of the distillate fuel will be assumed equal to 19.200 Btu/lb.

(4) The average hourly heat input of the coal and/or distillate fuel in MMBtu per hour. The hourly heat inputs will be calculated from the hourly fuel usage rates recorded in A.4.d.(1) of this section, and the heat content of the fuel as recorded in A.4.d.(3) of this section.

Sample Calculation:
(tons-coal/hr)(Btu/ton-coal) = Btu/hr or MMBtu/hr
or
(lb-mass distillate fuel/hr)(Btu/lb-mass) = Btu/hr or MMBtu/hr

(5) The hourly emission rate of PM and PM_{10} each:

(i) In pounds per MMBtu (lbs/MMBtu). The hourly emission rates will be calculated from the heat content of the fuel determined in A.4.d.(3) of this section, and the emission factor derived in A.4.a.(11) of this section.

Sample Calculation:
(tons-coal/Btu)(lb/tons-coal) = lbs-PM/Btu or lbs-PM/MMBtu
(tons-coal/Btu)(lb/tons-coal) = lbs-PM_{10}/Btu or lbs-PM_{10}/MMBtu

(ii) In pounds per hour (lbs/hr). The hourly emission rates will be calculated from the hourly tonnage of coal combusted, as determined in A.4.d.(1) of this section, and the emission factor derived in A.4.a.(11) of this section.

Sample Calculation:
(tons-coal/hour)(lb/tons-coal) = lbs-PM/hr
(tons-coal/hr)(lb/tons-coal) = lbs-PM_{10}/Btu

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **Recordkeeping (continued)**

(6) The emission rates of sulfur and SO_2 each, in pounds per hour (lbs/hr) and pounds per million Btu (lbs/MMBtu) measured by the CEMS required in A.4.c.(5) of this section; and the "as fired" fuel monitoring required in A.4.c.(6)(ii) of this section, for each averaging period described below:

(i) The sulfur emissions in pounds per hour (lbs/hr) for each 1-hour period. Sulfur emissions will be one-half of the SO_2 emissions measured.

(ii) The Sulfur and SO_2 emissions in pounds per million Btu (lbs/MMBtu)

(iii) The percent reduction levels required in A.2.a.(10) of this section on a rolling 30-day averaging period. (NSPS Subpart Da requirement)

(iv) The percent reduction levels required in A.2.a.(8) of this section on a rolling 30-day averaging period. (BACT requirement)

The compliance determination procedures established in 40 CFR Part 60.50Da(c) will be used to convert the continuous monitoring data into units of the applicable standards (lb/MMBtu and lb/hr, 3-hour, 24-hour and 30-day rolling average periods and percent reduction).

(7) The hourly emissions rate of NO_x in pounds per million Btu (lbs/MMBtu) for each 30-day rolling averaging period measured by the CEMS required in A.4.c.(9) of this section. The compliance determination procedures established in 40 CFR Part 60.50Da(d) will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, 24-hour, 30-day, annual rolling average periods).

(8) The recorded opacity (in percent opacity) from the continuous opacity CDCS system required in A.4.c.(17) of this section. The opacity will be determined from reducing all data from the successive 10-second readings and recorded for the following:

(i). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in NAC 445B.22017.1(b) and as set forth in 40 CFR Part 60.13(h).

(ii). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in 40 CFR Part 60.42Da(b).

(9) The emissions rate of CO in pounds per million Btu (lbs/MMBtu) and pounds per hour (lbs/hr) recorded by the CDCS required in A.4.c.(19) of this section. The compliance determination procedures established in 40 CFR Part 60.48Da will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, lb/hr and 24-hour rolling average periods).

(10) New Source Performance Standards (NSPS) - Notification and Record Keeping (40 CFR Part 60.7(b))
Permittee, upon the issuance date of this permit shall:

(1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

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Section V. Specific Operating Conditions

B. Emission Unit #S2.002 – Pulverized Coal Fired Utility Boiler. *UTM: North 4,399.588 km, East 691.243 km (Zone 11)*

System 02 – Pulverized Coal-Fired Utility Boiler, 530 MW Output (Nominal)

S2.002 ***Super-Critical Steam Utility Boiler****, Manufacturer TBD, Model # TBD, Serial # TBD, Unit Manufactured TBD. 5,216 million Btu/hr - Maximum Heat Input Rate*

1. NAC 445B.3405
   Air Pollution Equipment
   a. Emissions from **S2.002** shall be ducted to the following emissions control system with 100% capture and a maximum volume flow rate of 1,256,028 dry standard cubic feet per minute (DSCFM):
      (1) Fabric Filter Baghouse for the control of particulate matter and lead.
      (2) Dry scrubbing system for the control of sulfur dioxide, hydrogen fluoride and sulfuric acid mist.
      (3) Selective Catalyst Reduction (SCR) system for the control of oxides of nitrogen (NO_x). The SCR shall utilize ammonia injection into the SCR at a volume needed to comply with the applicable NO_x emission limits.
      (4) Low-NO_x burners and overfire air shall be utilized to minimize the formation of NO_x during the combustion process.
      (5) Halogenated Activated Carbon injection system for the control of mercury emissions.

   b. Stack Parameters
      Height: 600.0 ft
      Diameter: 22.2 ft
      Exhaust Temperature: 165 ^{o}F
      Velocity: 65.0 ft/sec
      Volume Flow: 1,256,028 DSCFM

2. NAC 445B.3405
   Emission Limits
   a. On and after the date of startup of **S2.002**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.002**, the following pollutants in excess of the following specified limits:
      (1) NAC 445B.305 – The discharge of PM (particulate matter), filterable and condensable, and PM_{10} (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere each will not exceed **198.3** pounds per hour.

      (2) NAC 445B.2203(1)(c) – The discharge of PM_{10}, filterable and condensable, to the atmosphere will not exceed **0.13** pound per million Btu.

      (3) SIP 445.731(1)(c) *Federally Enforceable SIP* – The discharge of PM, filterable and condensable, to the atmosphere will not exceed **0.13** pound per million Btu.

      (4) NAC 445B.305 *BACT Emission Limit* – The discharge of PM and PM_{10}, each, filterable, to the atmosphere will not exceed **0.015** pound per million Btu, based on a rolling 3-hour averaging period.

      (5) 40 CFR Part 60.42Da(c)(1) and (2) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases which contain filterable particulate matter in excess of either: 18 nanograms per Joule (ng/J) (0.14 lb/MWh) gross energy output; or 6.4 ng/J (0.015 lb per million Btu) heat input derived from the combustion of solid, liquid or gaseous fuel.

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405
   a. Emission Limits (continued)
      (6) NAC 445B.22047(3) – The discharge of sulfur to the atmosphere will not exceed **3,129.6** pounds per hour, based on a one-hour average.

      (7) Article 8.2.1.2 *Federally Enforceable SIP* - The discharge of sulfur to the atmosphere will not exceed **3,129.6** pounds per hour, based on a one-hour average.

      (8) NAC 445B.305 *BACT Emission Limit* – The discharge of SO_2 to the atmosphere will not exceed:
         (i) While combusting coal with a Sulfur content equal to or greater than 0.45 percent (rolling 30-day averaging period), based on daily ASTM sampling:
            (a) **0.09** pound per million Btu, based on a rolling 24-hour averaging period.
            (b) 95% minimum SO_2 removal efficiency will be maintained across the system, based on a rolling 30-day averaging period.
         (ii) While combusting coal with a Sulfur content less than 0.45 percent (rolling 30-day averaging period), based on daily ASTM sampling:
            (a) **0.065** pound per million Btu, based on a rolling 24-hour averaging period.
            (b) 91% minimum SO_2 removal efficiency will be maintained across the system, based on a rolling 30-day averaging period.

      (9) NAC 445B.305 – The discharge of SO_2 to the atmosphere will not exceed **462.0** pounds per hour, based on a rolling 3-hour averaging period.

      (10) 40 CFR Part 60.43Da(i)(1) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted under Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases that contain sulfur dioxide in excess of either: 180 ng/J (1.4 lb/MWh) gross energy output on a 30-day rolling average basis, or 5 percent of the potential combustion concentration (95 percent reduction) on a 30-day rolling average basis.

      (11) NAC 445B.305 *BACT Emission Limit* – The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.07** pound per million Btu, based on a rolling 24-hour averaging period.

      (12) NAC 445B.305 – The discharge of NO_x to the atmosphere will not exceed **365.1** pounds per hour, based on a rolling 24-hour averaging period.

      (13) 40 CFR Part 60.44Da(e) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted by Sec. 60.8 is completed, no new source owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases that contain nitrogen oxides (expressed as NO_2) in excess of 130 ng/J (1.0 lb MWh) gross energy output based on a 30-day rolling average basis.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(14) NAC 445B.305 *BACT Emission Limit* – The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.15** pound per million Btu, based on a rolling 24-hour averaging period.

(15) NAC 445B.305 – The discharge of CO to the atmosphere will not exceed **782.4** pounds per hour, based on a rolling 24-hour averaging period.

(16) NAC 445B.305 *BACT Emission Limit* – The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.0036** pound per million Btu, based on a rolling 3-hour averaging period.

(17) NAC 445B.305 – The discharge of VOC to the atmosphere will not exceed **18.8** pounds per hour, based on a rolling 3-hour averaging period.

(18) NAC 445B.305 *BACT Emission Limit* – The discharge of Pb (lead) to the atmosphere will not exceed **1.8 x 10^{-5}** pound per million Btu, based on a rolling 3-hour averaging period.

(19) NAC 445B.305 – The discharge of lead to the atmosphere will not exceed **0.092** pound per hour, based on a rolling 3-hour averaging period.

(20) 40 CFR Part 60.45Da(a) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted under §60.8 is completed, ***the Permittee*** shall not cause to be discharged into the atmosphere from **S2.002** any gases which contain mercury (Hg) emissions in excess of of each Hg emissions limit in paragraphs (i) through (iii) below on a 12-month rolling averaging period.

(i) For each coal-fired electric utility steam generating unit that burns only bituminous coal, ***the Permittee*** must not discharge into the atmosphere any gases from a new affected souce which contain Hg in excess of **20 x 10^{-6}** pound per megawatt hour (lb/MWh) or 0.020 lb/gigawatt-hour (GWh) on a gross output basis. The International System of Units (SI) equivalent is 0.0025 nanograms per joule (ng/J).

(ii) For each coal-fired electric utility steam generating unit that burns only sub-bituminous coal, if your unit is located in a county-level geographical area receiving less than or equal to 25 in/yr mean annual precipitation, based on the most recent publicly available U.S. Department of Agriculture 30-year data, ***the Permittee*** must not discharge into the atmosphere any gases from a new affected source which contain Hg in excess of **97 x 10^{-6}** lb/MWh or 0.097 lb/GWh on an output basis. The SI equivalent is 0.0122 ng/J.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(20) 40 CFR Part 60.45Da(a) *Federally Enforceable New Source Performance Standard Requirement* (Continued)

(iii) For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks (i.e., bituminous coal, sub-bituminous coal), ***the Permittee*** must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the monthly unit-specific Hg emissions limit established according to paragraph B.2.a.(20)(iii)(a) or (iii)(b) below:

(a) ***The Permittee*** must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the computed weighted Hg emissions limit based on the proportion of energy output (in British thermal units, Btu) contributed by each coal rank burned during the compliance period and its applicable Hg emissions limit in paragraphs B.2.a.(20)(i) and (ii) of this section as determined by Equation 1 of this section. ***The Permittee*** must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total Btu or megawatt hours contributed by all fuels burned during the compliance period.

Equation 1: $$EL_b = \frac{\sum_{i=1}^{n} EL_i * HH_i}{\sum_{i=1}^{n} HH_i}$$

Where:
EL_b is the total allowable Hg in lb/MWh that can be emitted to the atmosphere from any affected source being averaged under the blending provision.
EL_i is the Hg emissions limit for the subcategory i (coal rank) that applies to affected source, lb/MWh.
HH_i is the electricity output from **S2.002** during the production period related to use of the corresponding subcategory i (coal rank) that falls within the compliance period, gross MWh generated by **S2.002**.
n is the number of subcategories (coal ranks) averaged for an affected source.

(b) ***The Permittee*** must not discharge into the atmosphere any gases from the unit that contain Hg in excess of the computed weighted Hg emission limit based on the proportion of electricity output (in MWh) contributed by each coal rank burned during the compliance period and its applicable Hg emission limit in paragraphs B.2.a.(20)(i) and (ii) of this section as determined using Equation 1 of this section. ***The Permittee*** must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total megawatt hours contributed by both regulated and non-regulated fuels burned during the compliance period.

(21) NAC 445B.305 – The discharge of mercury to the atmosphere will not exceed **20×10^{-6} lb/MWh**, on a gross output basis, based on a rolling 12-month averaging period.

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(22) NAC 445B.305 *BACT Emission Limit* – The discharge of fluorides (expressed as hydrogen fluoride) to the atmosphere will not exceed **9.7×10^{-4}** pound per million Btu, based on a rolling 3-hour averaging period.

(23) NAC 445B.305 – The discharge of hydrogen fluoride to the atmosphere will not exceed **5.04** pounds per hour, based on a rolling 3-hour averaging period.

(24) NAC 445B.305 – The discharge of HCL (hydrogen chloride) to the atmosphere will not exceed **10.8** pounds per hour, based on a rolling 3-hour averaging period.

(25) NAC 445B.305 *BACT Emission Limit* – The discharge of H_2SO_4 (sulfuric acid mist) to the atmosphere will not exceed **0.0034** pound per million Btu, based on a rolling 3-hour averaging period.

(26) NAC 445B.305 – The discharge of sulfuric acid mist to the atmosphere will not exceed **17.7** pounds per hour, based on a rolling 3-hour averaging period.

(27) SIP 445.721 *Federally Enforceable SIP* - The opacity from **S2.002** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.

(28) NAC 445B.22017 – The opacity from **S2.002** will not equal or exceed 20%. The opacity must be determined as set forth in 445B.22017.1(a) or (b). **S2.002** is allowed one 6-minute period per hour of not more than 27 percent opacity as set forth in 40 CFR part 60.42Da(b).

(29) 40 CFR Part 60.42Da(b) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date the particulate matter performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(30) 40 CFR Part 60.48Da(c) *Federally Enforceable New Source Performance Standard Requirement* – The particulate matter emission standards under B.2.a.(5) of this section, the nitrogen oxides emission standards under B.2.a.(13) of this section and the Hg emission standards under B.2.a.(20) of this section apply at all times except during periods of startup, shutdown or malfunction.

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

b. NAC 445B.305 BACT Emission Limits During Startup or Shutdown – During periods of startup or shutdown of **S2.002**, ***the Permittee*** shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.002**, the following pollutants in excess of the limits specified in this section. These emission limits apply on a rolling 24-hour average basis during conditions of startup or shutdown. Emissions not occurring during startup or shutdown conditions are excluded from the calculation of 24-hour average emissions for comparison with the startup or shutdown emission limits.

(1) NAC 445B.305 *BACT Emission Limit* – The discharge of SO_2 to the atmosphere will not exceed **1.2** pounds per million Btu.

(2) NAC 445B.305 *BACT Emission Limit* – The discharge of NO_x to the atmosphere will not exceed **0.45** pound per million Btu.

(3) NAC 445B.305 *BACT Emission Limit* – The discharge of CO to the atmosphere will not exceed **0.45** pound per million Btu.

(4) NAC 445B.305 *BACT Emission Limit* – The discharge of VOC to the atmosphere will not exceed **0.01** pound per million Btu. Since VOC is not monitored continuously, the continuously monitored CO emission rate serves as an indicator of combustion efficiency and a surrogate indicator of demonstrating compliance for VOC emissions. Compliance with the CO emission limit in B.2.b.(3) above will constitute compliance with the VOC emission limit in this condition.

(5) NAC 445B.305 *BACT Emission Limit* – The discharge of HF to the atmosphere will not exceed **0.019** pound per million Btu. Since HF is not monitored continuously, the continuously monitored SO_2 emission rate serves as an indicator of dry scrubber performance and a surrogate indicator demonstrating compliance for HF emissions. Compliance with the SO_2 emission limit in B.2.b.(1) above will constitute compliance with the HF emission limit in this condition.

(6) NAC 445B.305 *BACT Emission Limit* – The discharge of H_2SO_4 to the atmosphere will not exceed **0.05** pound per million Btu. Since H_2SO_4 is not monitored continuously, the continuously monitored SO_2 emission rate serves as an indicator of dry scrubber performance and a surrogate indicator demonstrating compliance for H_2SO_4 emissions. Compliance with the SO_2 emission limit in B.2.b.(1) above will constitute compliance with the H_2SO_4 emission limit in this condition.

(7) NAC 445B.305 *BACT Emission Limit* – Since baghouse operation is not affected by startup and shutdown, separate startup and shutdown emission limits for PM, PM_{10}, and Pb are not necessary. During startup and shutdown, ***the Permittee*** shall comply with the PM and PM_{10} emission limits in B.2.a.(4) of this section and the Pb emission limits in B.2.a.(18) of this section.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

3. NAC 445B.3405

Operating Parameters

a. During all periods except startups or shutdowns, **S2.002** will combust coal only. Allowable coal types include sub-bituminous and Western bituminous coals. During startup or shutdown periods, **S2.002** may combust ultra low-sulfur distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight, either alone or in combination with coal.

b. During normal operations (i.e., periods when startups, shutdowns or malfunctions do not occur), the maximum operating heat input rate for **S2.002** will not exceed **5,216** million Btu per any one-hour period. During startup periods when ultra low-sulfur distillate fuel, either alone or in combination with coal is combusted, the maximum operating heat input rate for **S2.002** will not exceed **1,356** million Btu per any one-hour period.

c. **S2.002** may operate a total of 8,760 hours per calendar year.

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

a. **Compliance/Performance Testing**

Within 180 days of initial startup or within 60 days of achieving the maximum rate of production at **S2.002**, whichever is sooner, and after 7,000 hours of operation of additional operation following the initial testing, but not greater than 8,760 hours of additional operation after initial testing of **S2.002**, ***the Permittee*** shall:

(1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.002** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch. Compliance with the particulate matter standards contained in B.2.a.(1) through (4) shall be determined by using the dry basis F factor (O_2) procedures in Method 19 to compute the emissions rate. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of 160 ± 14^{0}C (320 ± 25^{0}F). For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points (40 CFR Part 60.50Da(b)). The daily coal sampling required in B.4.c.(4) of this section shall be performed during this test.

(2) Conduct and record a Method 201A and 202 performance test for PM_{10} on the exhaust stack of **S2.002** consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in B.4.a.(1) above. All particulate captured in the Method 5 test will be considered PM_{10} for compliance demonstration purposes.

(3) Conduct and record a Method 6 or 6C performance test for SO_2 on the exhaust stack of **S2.002** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C.

(4) Conduct and record a Method 25 or 25A performance test for VOC on the exhaust stack of **S2.002** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25 or 25A.

(5) Conduct and record a Method 29 performance test for Pb on the exhaust stack of **S2.002** consisting of three valid runs. The Method 29 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 29.

(6) Conduct and record a Method 26 performance test for HF and HCl on the exhaust stack of **S2.002** consisting of three valid runs. The Method 26 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 26.

(7) Conduct and record a Method 8 performance test for H_2SO_4 on the exhaust stack of **S2.002** consisting of three valid runs. The Method 8 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 8.

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

a. **Compliance/Performance Testing (continued)**

(8) During the testing required in B.4.a.(1) of this section, Method 9 and the procedures in §60.11 shall be used to determine the opacity of the discharge from the exhaust stack of **S2.002.** The Method 9 opacity test must be conducted in accordance with the visible emissions evaluation procedures contained in 40 CFR Part 60, Appendix A, Method 9. A certified visible emissions reader must conduct the visible emissions evaluations for a period of at least 6 minutes. The opacity readings must be averaged such that compliance with both a 6-minute average and 2, 3-minute averages are determined (40 CFR Part 60.50Da(b)(3)).

(9) The performance tests will be conducted at the maximum operating heat input rate limit established in B.3.b. of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. ***The Permittee*** shall make available to the director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard (NAC 445B.252.3).

(10) ***The Permittee*** shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the performance test to allow the director to review the proposed testing procedures (NAC 445B.252.4). The alternative to the reference methods and procedures provided in 40 CFR Part 60.50Da(e) may be utilized to the extent that they are applicable to **S2.002**, and must be identified in the testing procedures as alternative methods.

(11) During each performance test required in B.4.a.(1) through (7) of this section, record the quantity (in tons) of coal combusted during each test run, the heat content value of the coal combusted during each test run (in Btu/ton) and include these data in the test results submitted. The emissions results of the Method 6 performance test for SO_2 must be converted to emissions of sulfur (both lb/hr and lb/MMBtu). The emissions results of the Method 5 or Method 201A and 202 performance test for PM_{10} must be reported in lb/MMBtu.

(12) As a result of the most recent performance test performed in B.4.a.(1) and (2) of this section, derive emission factors for each of the following:

(i) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable and condensable.
(ii) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable only.
(iii) Pounds of PM_{10} per ton of coal (lbs-PM_{10}/tons-coal), filterable and condensable.
(iv) Pounds of PM_{10} per ton of coal (lbs-PM_{10}/tons-coal), filterable only.

These emissions factors will be based on the average of the 3 test runs.

(13) Within 60 days after completing the performance tests and opacity observations contained in B.4.a. of this section, ***the Permittee*** shall furnish the director a written report of the results of the performance tests, the opacity observations and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3689 (NAC 445B.252.8).

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing**

Within 60 days after achieving the maximum production rate at which **S2.002** will be operated, but not later than 180 days after initial startup of **S2.002**, ***the Permittee*** shall:

(1) ***The Permittee*** will comply with the particulate matter standard in §60.42Da(c)(2) and shall demonstrate compliance with such standard according to the requirements in paragraphs (o)(1), (o)(2) and (o)(4) of 40 CFR Part §60.48Da. (§60.48Da(o), Compliance provisions; NSPS requirement). ***The Permittee*** shall:

(i) §60.48Da(o)(1) Conduct an initial performance test according to the requirements of §60.50Da to demonstrate compliance by the applicable date specified in §60.8(a) and thereafter, conduct the performance test **annually**, and

(ii) §60.48Da(o)(2) Use opacity monitoring equipment as an indicator of continuous particulate matter control device performance and demonstrate compliance with §60.42Da(b). In addition, baseline parameters shall be established as the highest hourly opacity averaged during the performance test. If any hourly average opacity measurement is more than 110 percent of the baseline level, the owner or operator will conduct another performance test within 60 days to demonstrate compliance. A new baseline is established during each stack test. The new baseline shall not exceed the opacity limit specified in §60.42Da(b), and

(iii) §60.48Da(o)(4) Install, calibrate, maintain and continuously operate a bag leak detection system according to paragraphs (i) through (viii) of §60.48Da(o)(4).

(2) ***The Permittee*** shall determine compliance with the particulate matter standards in §60.42Da as follows:

(i) §60.50Da(b)(1) The dry basis F factor (O_2) procedures in Method 19 shall be used to compute the emission rate of particulate matter.

(ii) §60.50Da(b)(2) For the particulate matter concentration, Method 5 shall be used.

(iii) §60.50Da(b)(2)(i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (325 ± 25 °F).

(iv) §60.50Da(b)(2)(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points.

(v) §60.50Da(b)(3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(vi) §60.50Da(e) ***The Permittee*** may use the following as alternatives to the reference methods and procedures specified in this section:

(1) §60.50Da(e)(1) For Method 5 or 5B, Method 17 may be used if the stack temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of §§2.1 and 2.3 of Method 5B may not be used in Method 17.

(2) §60.50Da(e)(2) The Fc factor (CO_2) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of §60.46(d)(1). The CO_2 shall be determined in the same manner as the O_2 concentration.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(3) ***The Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percent reduction option under §60.43Da is based on the average emission rates for sulfur dioxide and percent reduction for sulfur dioxide for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percentage reduction option under §60.43Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and a new percent reduction for sulfur dioxide are calculated to show compliance with the applicable standards.

(iii) §60.48Da(g) ***The Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(1) §60.48Da(g)(1) Compliance with applicable 30-day rolling average SO_2 emission limitation is determined by calculating the arithmetic average of all hourly emission rates for SO_2 for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

(2) §60.50Da(g)(2) Compliance with applicable SO_2 percentage reduction requirements is determined based on the average inlet and outlet SO_2 emission rates for the 30 successive boiler operating days.

(iv) §60.48Da(m) ***The Permittee*** shall calculate SO_2 emissions by multiplying the average SO_2 output concentration, measured according to the provisions of §60.49Da(b), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).

(4) As applicable, ***the Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(i) §60.50Da(c)(1) The percent of potential SO_2 emissions ($\%P_s$) to the atmosphere shall be computed using the following equation:

$$\%P_s = [(100 - \%R_f)\ (100 - \%R_g)] / 100$$

Where:
$\%P_s$ = percent of potential SO_2 emissions, percent.
$\%R_f$ = percent reduction from fuel pre-treatment, percent.
$\%R_g$ = percent reduction by SO_2 control system, percent.

(ii) §60.50Da(c)(2) The procedures in Method 19 may be used to determine percent reduction ($\%R_f$) of sulfur by such processes as fuel pre-treatment (physical coal cleaning, hydro-de-sulfurization of fuel oil, etc.), coal pulverizers and bottom and fly ash interaction. This determination is optional.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(4) As applicable, ***the Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows: (Continued)

(iii) §60.50Da(c)(3) The procedures in Method 19 shall be used to determine the SO_2 percent reduction ($\%R_g$) of any SO_2 control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO_2 control device and the average SO_2 input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.

(iv) §60.50Da(c)(4) The appropriate procedures in Method 19 shall be used to determine the emission rate of SO_2.

(v) §60.50Da(c)(5) The continuous monitoring system in §60.49Da(b) and (d) shall be used to determine the concentrations of SO_2 and CO_2 or O_2.

(5) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average SO_2 emission limitation under §60.43Da is determined by calculating the arithmetic average of all hourly emission rates for SO_2 for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(6) ***The Permittee*** shall determine compliance with the NO_x standards in §60.44Da as follows:

(i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitation under §60.44Da is based on the average emission rates for nitrogen oxides for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitations under §60.44Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for nitrogen oxides is calculated to show compliance with the applicable standards.

(iii) §60.48Da(g) The owner or operator of an affected facility subject to emission limitations in this subpart shall determine compliance as follows:

(1) §60.48Da(g)(1) Compliance with applicable 30-day rolling average NO_x emission limitation is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

(iv) §60.48Da(i) ***The Permittee*** shall calculate NO_x emissions by multiplying the average hourly NO_x output concentration, measured according to the provisions of §60.49Da(c), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).

(7) ***The Permittee*** shall determine compliance with the NO_x standards in §60.44Da as follows:

(i) §60.50Da(d)(1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x.

(ii) §60.50Da(d)(2) The continuous monitoring system in §60.49Da(c) and (d) shall be used to determine the concentrations of NO_x and CO_2 or O_2.

(8) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average NO_x emission limitation under §60.44Da is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown and malfunction.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures:

(i) §60.50Da(h)(1) The initial performance test shall be commenced by the applicable date specified in §60.8(a). The required continuous monitoring systems must be certified prior to commencing the test. The performance test consists of collecting hourly Hg emission data (lb/MWh) with the continuous monitoring systems for 12 successive months of unit operation (excluding hours of unit startup, shutdown and malfunction). The average Hg emission rate is calculated for each month, and then the weighted, 12-month average Hg emission rate is calculated according to paragraph (h)(2) or (h)(3) of this section, as applicable. If, for any month in the initial performance test, the minimum data capture requirement in §60.49Da(p)(4)(i) is not met, the owner or operator shall report a substitute Hg emission rate for that month, as follows. For the first such month, the substitute monthly Hg emission rate shall be the arithmetic average of all valid hourly Hg emission rates recorded to date. For any subsequent month(s) with insufficient data capture, the substitute monthly Hg emission rate shall be the highest valid hourly Hg emission rate recorded to date. When the 12-month average Hg emission rate for the initial performance test is calculated, for each month in which there was insufficient data capture, the substitute monthly Hg emission rate shall be weighted according to the number of unit operating hours in that month. Following the initial performance test, the owner or operator shall demonstrate compliance by calculating the weighted average of all monthly Hg emission rates (in lb/MWh) for each 12 successive calendar months, excluding data obtained during startup, shutdown, or malfunction.

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average.

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in B.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in B.4.b.(9)(ii)(1)(C) of this section.

(A) §60.50Da(h)(2)(i)(A) If the Hg CEMS measures Hg concentration on a wet basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h$$

Where:

$\mathbf{E_h}$ = Hg mass emissions for the hour, (lb)

$\mathbf{K}$ = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

$\mathbf{C_h}$ = Hourly Hg concentration, wet basis, (µgm/scm)

$\mathbf{Q_h}$ = Hourly stack gas volumetric flow rate, (scfh)

$\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated. For example, $t_h = 0.50$ for a half-hour of unit operation and 1.00 for a full hour of operation.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in B.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in B.4.b.(9)(ii)(1)(C) of this section. (Continued)

(B) §60.50Da(h)(2)(i)(B) If the Hg CEMS measures Hg concentration on a dry basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h * (1 - B_{ws})$$

Where:

$\mathbf{E_h}$ = Hg mass emissions for the hour, (lb)

$\mathbf{K}$ = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

$\mathbf{C_h}$ = Hourly Hg concentration, dry basis, (µgm/dscm)

$\mathbf{Q_h}$ = Hourly stack gas volumetric flow rate, (scfh)

$\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated

$\mathbf{B_{ws}}$ = Stack gas moisture content, expressed as a decimal fraction (*e.g.*, for 8 percent H_2O, $B_{ws} = 0.08$)

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in B.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in B.4.b.(9)(ii)(1)(C) of this section. (Continued)

(C) §60.50Da(h)(2)(i)(C) Use the equation below, to calculate M, the total mass of Hg emitted for the month, by summing the hourly masses derived the equations in B.4.b.(9)(ii)(1)(A) or (B) of this section (as applicable):

$$M = \sum_{h=1}^{n} E_h$$

Where:

M = Total Hg mass emissions for the month, (lb)

$\mathbf{E_h}$ = Hg mass emissions for hour "h", from B.4.b.(9)(ii)(1)(A) or (B)of this section, (lb)

n = The number of unit operating hours in the month with valid CEM and electrical output data, excluding hours of unit startup, shutdown and malfunction

(2) §60.50Da(h)(2)(ii) Calculate the monthly Hg emission rate on an output basis (lb/MWh) using the equation below.

$$ER = \frac{M}{P}$$

Where:

ER = Monthly Hg emission rate, (lb/MWh)

M = Total mass of Hg emissions for the month, from Equation 4, above, (lb)

P = Total electrical output for the month, for the hours used to calculate M, (MWh)

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(3) §60.50Da(h)(2)(iii) Until 12 monthly Hg emission rates have been accumulated, calculate and report only the monthly averages. Then, for each subsequent calendar month, use the equation below to calculate the 12-month rolling average as a weighted average of the Hg emission rate for the current month and the Hg emission rates for the previous 11 months, with one exception. Calendar months in which the unit does not operate (zero unit operating hours) shall not be included in the 12-month rolling average.

$$E_{avg} = \frac{\sum_{i=1}^{12} (ER)_i * n_i}{\sum_{i=1}^{12} n_i}$$

Where:

$\mathbf{E_{avg}}$ = Weighted 12-month rolling average Hg emission rate, (lb/MWh)

$\mathbf{(ER)_i}$ = Monthly Hg emission rate, for month "i", (lb/MWh)

n = The number of unit operating hours in month "i" with valid CEM and electrical output data, excluding hours of unit startup, shutdown, and malfunction

(iii) §60.50Da(h)(3) If a sorbent trap monitoring system is used in lieu of a Hg CEMS, as described in §75.15 of this chapter and in appendix K to Part 75 of this chapter, calculate the monthly Hg emission rates using the equations in B.4.b.(9)(ii)(1)(B) through B.4.b.(9)(ii)(2) of this section, except that for a particular pair of sorbent traps, C_h in the equation in B.4.b.(9)(ii)(1)(B) shall be the flow-proportional average Hg concentration measured over the data collection period.

(iv) §60.50Da(i) Daily calibration drift (CD) tests and quarterly accuracy determinations shall be performed for Hg CEMS in accordance with Procedure 1 of Appendix F to this Part. For the CD assessments, you may either use elemental mercury or mercuric chloride (Hg° or $HgCl_2$) standards. The four quarterly accuracy determinations shall consist of one relative accuracy test audit (RATA) and three measurement error (ME) tests using $HgCl_2$ standards, as described in section 8.3 of Performance Specification 12-A in Appendix B to this Part (note: Hg° standards may be used if the Hg monitor does not have a converter). Alternatively, the owner or operator may implement the applicable daily, weekly, quarterly and annual quality assurance (QA) requirements for Hg CEMS in Appendix B to Part 75 of this chapter, in lieu of the QA procedures in Appendices B and F to this Part. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with Appendices A and B to Part 75 of this chapter, and all other quality assurance requirements specified in Appendix K to Part 75 of this chapter shall be met for sorbent trap monitoring systems.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(10) §60.48Da(l) ***The Permittee*** shall calculate the Hg emission rate (lb/MWh) for each calendar month of the year, using hourly Hg concentrations measured according to the provisions of §60.49Da(p) in conjunction with hourly stack gas volumetric flow rates measured according to the provisions of §60.49Da(l) or (m), and hourly gross electrical outputs, determined according to the provisions in §60.49Da(k). Compliance with the applicable standard under §60.49Da is determined on a 12-month rolling average basis.

(11) ***The Permittee*** shall determine compliance with the opacity standard in 40 CFR §60.42Da(b) via continuous opacity monitoring in accordance with B.4.c.(16) and (17) of this section.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring**

The Permittee, upon startup of **S2.002**, will:

(1) Install, calibrate, operate and maintain mass measurement devices to continuously measure the amount of fuel combusted in **S2.002**. The mass measurement devices must be installed at appropriate locations in the fuel delivery system to accurately and continuously measure the following listed fuels combusted in **S2.002**:

(i) Coal (in tons)

(ii) Distillate Fuel (in pounds)

(2) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the quantities of fuel as measured by the fuel mass measurement devices required in B.4.c.(1) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications.

(3) Perform coal sampling of the coal prior to it entering the boiler. Sampling shall be conducted for moisture, ash, sulfur content and gross calorific value. Coal moisture, ash, sulfur content and gross calorific value will be recorded on 24-hour and 30-day rolling averaging periods. A coal analysis shall be performed daily and the results of these analyses shall be retained for at least two years following the date of the measurement. All sample collection, sample preparation, and analyses performed or caused to be performed shall be conducted according to the methods specified in B.4.c.(4) of this section and in accordance with the coal sampling and analysis plan prepared by WPEA and approved by the BAPC under B.4.c.(4) of this section.

(4) Perform coal sampling as required in B.4.c.(3) of this section according to Section 12.5.3.2.2 in Method 19 in Appendix A to Part 60 and the appropriate ASTM method. The appropriate ASTM methods will be used to determine the coal moisture, ash and sulfur contents. At least 90 days prior to startup of **S2.002**, ***the Permittee*** shall submit a coal sampling and analysis plan to the Nevada Bureau of Air Pollution Control (BAPC), detailing the procedures and equipment that will be used to obtain samples and analyze the coal, including the appropriate ASTM test methods that will be used for each parameter. The BAPC will review the coal sampling and analysis plan and approve the plan or request additional information within 30 days of receipt of the plan.

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(5) Install, calibrate, operate and maintain a SO_2 continuous emissions monitor system (CEMS) (consisting of a SO_2 pollutant concentration monitor in conjunction with the flow monitoring device required in B.4.c.(26) of this section) to continuously measure the concentration of SO_2 (in ppm), percent reduction and SO_2 emission rate (in lb/hr, lb/MMBtu and lb/MWh) from **S2.002**. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.002** to accurately and continuously measure the SO_2 concentrations in **S2.002** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(b), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(6) Determine the removal efficiencies in B.2.a.(8) of this section via the following procedure: (BACT requirement)
(i) SO_2 emissions shall be monitored at the outlet of the SO_2 control device.
(ii) An "as-fired" fuel monitoring system shall be used to determine SO_2 emissions, in accordance with 40 CFR Part 60.49Da(b)(3).
(iii) Percent SO_2 removal shall be calculated on a rolling 30-day averaging period.
(iv) The procedures established in 40 CFR Part 60.49Da(i) shall be used to conduct monitoring system performance evaluations.

(7) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the SO_2 concentration (in ppm), SO_2 percent reduction (including percent reduction as measured in accordance with §60.49Da(b), as applicable, and determined in accordance with B.4.c.(6) of this section) and SO_2 emission rate (in lb/hr, lb/MMBtu and lb/MWh), as measured by the CEMS required in B.4.c.(5) of this section, on a 1-hour, 3-hour, 24-hour and 30-day periods. Percent SO_2 reduction will be determined on a rolling 30-day averaging period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da, 40 CFR Part 60, Appendix B, Performance Specifications, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(8) Divide the results of the 1-hour average for SO_2 emissions (in lb/hr), recorded in B.4.c.(7) of this section, by 2 to obtain the average Sulfur emissions in lb/hour.

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(9) Install, calibrate, operate and maintain a NO_x continuous emissions monitor system (CEMS) (consisting of a NO_x pollutant concentration monitor in conjunction with the flow monitoring device required in B.4.c.(26) of this section) to continuously measure the concentration of NO_x (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh) from **S2.002**. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.002** to accurately and continuously measure the NO_x concentration in **S2.002** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(c), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F. If the owner or operator has installed a nitrogen oxides emission rate continuous emission monitoring system (CEMS) to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of §60.49Da(c), except that the owner or operator shall also meet the requirements of §60.51Da. Data reported to meet the requirements of §60.51Da shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter. The procedures established in 40 CFR Part 60.49Da(i) shall be used to conduct monitoring system performance evaluations.

(10) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the NO_x concentration (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh), as measured by the CEMS required in B.4.c.(9) of this section, on a 24-hour, 30-day and 12-month rolling period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(11) Install, calibrate, operate and maintain a continuous monitoring system for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. (40 CFR Part 60.49Da(d))

(12) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored (40 CFR Part 60.49Da(d)). The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267.

(13) Operate the continuous monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR Part 60.49Da(e))

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(14) Obtain emission data from the continuous emission monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide for at least 90 percent of all operating hours for each 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in paragraph §60.49Da(h). (40 CFR Part 60.49Da(f)(2))

(15) Use methods and procedures in §60.49Da(i) to conduct monitoring system performance evaluations under §60.13(c) and calibration checks under §60.13(d) for the continuous emission monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide. Acceptable alternative methods and procedures are given in §60.49Da(j). (40 CFR Part 60.49Da(i))

(16) Install, calibrate, operate and maintain a continuous opacity monitoring system to continuously measure and record the opacity discharged from **S2.002**. The continuous opacity monitoring system will be installed at an appropriate location in the discharge stack of **S2.002** to accurately and continuously measure the opacity of **S2.002** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, and 40 CFR Part 75.10. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.

(17) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the opacity (in percent opacity) as measured by the continuous opacity monitoring system required in B.4.c.(16) of this section on a 3-minute average period and 6-minute average period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, 40 CFR Part 75.10 and 40 CFR Part 75.14.

(18) Install, calibrate, operate and maintain a CO continuous emissions monitor system (CEMS) (consisting of a CO pollutant concentration monitor in conjunction with the flow monitoring device required in B.4.c.(26) of this section) to continuously measure the concentration of CO (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu) from **S2.002**, on a rolling 24-hour averaging period. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.002** to accurately and continuously measure the CO concentration in **S2.002** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(19) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the CO concentration (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu), as measured by the CEMS required in B.4.c.(18) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

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Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(20) The owner or operator of an affected facility demonstrating compliance with an Hg limit in §60.45Da shall install and operate a Continuous Emissions Monitoring System (CEMS) to measure and record the concentration of Hg in the exhaust gases from each stack. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.002** to accurately and continuously measure the Hg concentration in **S2.002** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(p) and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(21) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the Hg concentration (in ppm) and Hg emissions rate (in lb/MWh), as measured by the CEMS required in B.4.c.(20) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F .

(22) Within 180 days of initial startup of **S2.002**, ***the Permittee*** will assemble the information required in B.4.c.(24)(i) of this section such that the BAPC can evaluate the percent reductions established for SO_2 in B.2.a.(8)of this Section, based on actual performance of **S2.002**. The percent reductions will be adjusted according to the procedures outlined in B.4.c.(24)(ii) of this Section. ***The Permittee*** will provide the assembled information postmarked within 240 days of initial startup.

(23) ***The Permittee*** will provide the information required in B.4.c.(24)(i) of this section such that BAPC can re-evaluate the percent reductions values established for SO_2 in B.2.a.(8) of this Section within 180 days of any change in the rolling 30-day averaging period fuel sulfur content, as determined in B.4.c.(3) of this section, in excess of ±0.2%. The percent reductions will be adjusted according to the procedures outlined in B.4.c.(24)(ii) of this Section.

(24) Procedure for truing percent reductions values in Section B.2.a.(8) of this Section, as required by B.4.c.(22) or (23).

(i) ***The Permittee*** will provide actual performance of **S2.002** as determined by data gathered by the CEMS and fuel sulfur monitoring for the preceding 180 day period. Data shall consist of:

(a) As fired coal sulfur content on both a 24-hour and 30-day rolling period, as specified in B.4.c.(3) and (4) of this section.

(b) Actual SO_2 percent removal on a rolling 30-day averaging period, using the method specified in B.4.c.(6) of this section.

(c) Actual SO_2 emissions, in pounds per million BTU, on a rolling 24-hour averaging period, using the method specified in B.4.c.(5) of this section.

(ii) Within 60 days of the submittal required in B.4.c.(24)(i), the Bureau of Air Pollution Control (BAPC) will determine the basis to adjust the percent removal efficiencies in B.2.a.(8)(i)(b) and (ii)(b) as follows:

(a) BAPC will increase or decrease the percent SO_2 removal efficiency criteria in B.2.a.(8) of this section if the data show there is greater than a ±1.0% change in the SO_2 removal efficiency.

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(25) The owner or operator of an affected facility with electricity generation shall install, calibrate, maintain and operate a wattmeter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor. (40 CFR § 60.49Da(k)).

(26) Install, certify, operate and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B and procedure 1 of Appendix F of 40 CFR Part 60, and record the output of the system, for measuring the flow of exhaust gases discharged to the atmosphere in accordance with 40 CFR§ 60.49Da(1). Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR §75.21, and validated according to 40 CFR §75.23, may be used. (40 CFR § 60.49Da(m)).

(27) All conversions from Btu/hr unit input to MW unit output must use equivalents found in 40 CFR 60.40(a)(1) for electric utilities. (40 CFR §60.50Da(g)(1)).

(28) Operate the continuous monitoring systems required under 40 CFR Part 60, Subpart Da and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR §60.49Da(e))

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **Recordkeeping**

The Permittee will maintain a contemporaneous log containing at a minimum, the following recordkeeping for each day, or part of a day that **S2.002** is operating:

(1) The total hourly quantity of:

i. Coal (in tons) combusted, for each hour of operation based on the data recorded by the CDCS as required in B.4.c.(2) of this section.

ii. Distillate fuel (in pounds) combusted, for each hour of operation based on the data recorded by the CDCS as required in B.4.c.(2) of this section.

(2) Daily hours of operation:

i. The total daily hours of operation for the corresponding date.

(3) The moisture, ash and sulfur content of the coal, as required in B.4.c.(3) of this section. The average heat content of the coal, in Btu/ton, combusted for the corresponding date. The heat content of the coal will be based on the gross calorific value determined in B.4.c.(3) of this section. The average heat content of the distillate fuel will be assumed equal to 19.200 Btu/lb.

(4) The average hourly heat input of the coal and/or distillate fuel in MMBtu per hour. The hourly heat inputs will be calculated from the hourly fuel usage rates recorded in B.4.d.(1) of this section, and the heat content of the fuel as recorded in B.4.d.(3) of this section.

Sample Calculation:
(tons-coal/hr)(Btu/ton-coal) = Btu/hr or MMBtu/hr
or
(lb-mass distillate fuel/hr)(Btu/lb-mass) = Btu/hr or MMBtu/hr

(5) The hourly emission rate of PM and PM_{10} each:

(i) In pounds per MMBtu (lbs/MMBtu). The hourly emission rates will be calculated from the heat content of the fuel determined in B.4.d.(3) of this section, and the emission factor derived in B.4.a.(11) of this section.

Sample Calculation:
(tons-coal/Btu)(lb/tons-coal) = lbs-PM/Btu or lbs-PM/MMBtu
(tons-coal/Btu)(lb/tons-coal) = lbs-PM_{10}/Btu or lbs-PM_{10}/MMBtu

(ii) In pounds per hour (lbs/hr). The hourly emission rates will be calculated from the hourly tonnage of coal combusted, as determined in B.4.d.(1) of this section, and the emission factor derived in B.4.a.(11) of this section.

Sample Calculation:
(tons-coal/hour)(lb/tons-coal) = lbs-PM/hr
(tons-coal/hr)(lb/tons-coal) = lbs-PM_{10}/Btu

Section V. Specific Operating Conditions (continued)

B. Emission Unit #S2.002 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **Recordkeeping (continued)**

(6) The emission rates of sulfur and SO_2 each, in pounds per hour (lbs/hr) and pounds per million Btu (lbs/MMBtu) measured by the CEMS required in B.4.c.(5) of this section; and the "as fired" fuel monitoring required in B.4.c.(6)(ii) of this section, for each averaging period described below:

(i) The sulfur emissions in pounds per hour (lbs/hr) for each 1-hour period. Sulfur emissions will be one-half of the SO_2 emissions measured.

(ii) The Sulfur and SO_2 emissions in pounds per million Btu (lbs/MMBtu)

(iii) The percent reduction levels required in B.2.a.(10) of this section on a rolling 30-day averaging period. (NSPS Subpart Da requirement)

(iv) The percent reduction levels required in B.2.a.(8) of this section on a rolling 30-day averaging period. (BACT requirement)

The compliance determination procedures established in 40 CFR Part 60.50Da(c) will be used to convert the continuous monitoring data into units of the applicable standards (lb/MMBtu and lb/hr, 3-hour, 24-hour and 30-day rolling average periods and percent reduction).

(7) The hourly emissions rate of NO_x in pounds per million Btu (lbs/MMBtu) for each 30-day rolling averaging period measured by the CEMS required in B.4.c.(9) of this section. The compliance determination procedures established in 40 CFR Part 60.50Da(d) will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, 24-hour, 30-day, annual rolling average periods).

(8) The recorded opacity (in percent opacity) from the continuous opacity CDCS system required in B.4.c.(17) of this section. The opacity will be determined from reducing all data from the successive 10-second readings and recorded for the following:

(i). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in NAC 445B.22017.1(b) and as set forth in 40 CFR Part 60.13(h).

(ii). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in 40 CFR Part 60.42Da(b).

(9) The emissions rate of CO in pounds per million Btu (lbs/MMBtu) and pounds per hour (lbs/hr) recorded by the CDCS required in B.4.c.(19) of this section. The compliance determination procedures established in 40 CFR Part 60.48Da will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, lb/hr and 24-hour rolling average periods).

(10) New Source Performance Standards (NSPS) - Notification and Record Keeping (40 CFR Part 60.7(b))
Permittee, upon the issuance date of this permit shall:

(1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

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Section V. Specific Operating Conditions

C. Emission Unit #S2.003 – Pulverized Coal Fired Utility Boiler. *UTM: North 4,399.588 km, East 691.362 km (Zone 11)*

System 03 – Pulverized Coal-Fired Utility Boiler, 530 MW Output (Nominal)

S2.003 ***Super-Critical Steam Utility Boiler****, Manufacturer TBD, Model # TBD, Serial # TBD, Unit Manufactured TBD. 5,216 million Btu/hr - Maximum Heat Input Rate*

1. NAC 445B.3405
   Air Pollution Equipment
   a. Emissions from **S2.003** shall be ducted to the following emissions control system with 100% capture and a maximum volume flow rate of 1,256,028 dry standard cubic feet per minute (DSCFM):
      (1) Fabric Filter Baghouse for the control of particulate matter and lead.
      (2) Dry scrubbing system for the control of sulfur dioxide, hydrogen fluoride and sulfuric acid mist.
      (3) Selective Catalyst Reduction (SCR) system for the control of oxides of nitrogen (NO_x). The SCR shall utilize ammonia injection into the SCR at a volume needed to comply with the applicable NO_x emission limits.
      (4) Low-NO_x burners and overfire air shall be utilized to minimize the formation of NO_x during the combustion process.
      (5) Halogenated Activated Carbon injection system for the control of mercury emissions.

   b. Stack Parameters
      Height: 600.0 ft
      Diameter: 22.2 ft
      Exhaust Temperature: 165 ^{o}F
      Velocity: 65.0 ft/sec
      Volume Flow: 1,256,028 DSCFM

2. NAC 445B.3405
   Emission Limits
   a. On and after the date of startup of **S2.003**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.003**, the following pollutants in excess of the following specified limits:
      (1) NAC 445B.305 – The discharge of PM (particulate matter), filterable and condensable, and PM_{10} (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere each will not exceed **198.3** pounds per hour.

      (2) NAC 445B.2203(1)(c) – The discharge of PM_{10}, filterable and condensable, to the atmosphere will not exceed **0.13** pound per million Btu.

      (3) SIP 445.731(1)(c) *Federally Enforceable SIP* – The discharge of PM, filterable and condensable, to the atmosphere will not exceed **0.13** pound per million Btu.

      (4) NAC 445B.305 *BACT Emission Limit* – The discharge of PM and PM_{10}, each, filterable, to the atmosphere will not exceed **0.015** pound per million Btu, based on a rolling 3-hour averaging period.

      (5) 40 CFR Part 60.42Da(c)(1) and (2) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases which contain filterable particulate matter in excess of either: 18 nanograms per Joule (ng/J) (0.14 lb/MWh) gross energy output; or 6.4 ng/J (0.015 lb per million Btu) heat input derived from the combustion of solid, liquid or gaseous fuel.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405
   a. Emission Limits (continued)
      (6) NAC 445B.22047(3) – The discharge of sulfur to the atmosphere will not exceed **3,129.6** pounds per hour, based on a one-hour average.

      (7) Article 8.2.1.2 *Federally Enforceable SIP* - The discharge of sulfur to the atmosphere will not exceed **3,129.6** pounds per hour, based on a one-hour average.

      (8) NAC 445B.305 *BACT Emission Limit* – The discharge of SO_2 to the atmosphere will not exceed:
         (i) While combusting coal with a Sulfur content equal to or greater than 0.45 percent (rolling 30-day averaging period), based on daily ASTM sampling:
            (a) **0.09** pound per million Btu, based on a rolling 24-hour averaging period.
            (b) 95% minimum SO_2 removal efficiency will be maintained across the system, based on a rolling 30-day averaging period.
         (ii) While combusting coal with a Sulfur content less than 0.45 percent (rolling 30-day averaging period), based on daily ASTM sampling:
            (a) **0.065** pound per million Btu, based on a rolling 24-hour averaging period.
            (b) 91% minimum SO_2 removal efficiency will be maintained across the system, based on a rolling 30-day averaging period.

      (9) NAC 445B.305 – The discharge of SO_2 to the atmosphere will not exceed **462.0** pounds per hour, based on a rolling 3-hour averaging period.

      (10) 40 CFR Part 60.43Da(i)(1) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted under Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases that contain sulfur dioxide in excess of either: 180 ng/J (1.4 lb/MWh) gross energy output on a 30-day rolling average basis, or 5 percent of the potential combustion concentration (95 percent reduction) on a 30-day rolling average basis.

      (11) NAC 445B.305 *BACT Emission Limit* – The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.07** pound per million Btu, based on a rolling 24-hour averaging period.

      (12) NAC 445B.305 – The discharge of NO_x to the atmosphere will not exceed **365.1** pounds per hour, based on a rolling 24-hour averaging period.

      (13) 40 CFR Part 60.44Da(e) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted by Sec. 60.8 is completed, no new source owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases that contain nitrogen oxides (expressed as NO_2) in excess of 130 ng/J (1.0 lb MWh) gross energy output based on a 30-day rolling average basis.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(14) NAC 445B.305 *BACT Emission Limit* – The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.15** pound per million Btu, based on a rolling 24-hour averaging period.

(15) NAC 445B.305 – The discharge of CO to the atmosphere will not exceed **782.4** pounds per hour, based on a rolling 24-hour averaging period.

(16) NAC 445B.305 *BACT Emission Limit* – The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.0036** pound per million Btu, based on a rolling 3-hour averaging period.

(17) NAC 445B.305 – The discharge of VOC to the atmosphere will not exceed **18.8** pounds per hour, based on a rolling 3-hour averaging period.

(18) NAC 445B.305 *BACT Emission Limit* – The discharge of Pb (lead) to the atmosphere will not exceed **1.8 x 10^{-5}** pound per million Btu, based on a rolling 3-hour averaging period.

(19) NAC 445B.305 – The discharge of lead to the atmosphere will not exceed **0.092** pound per hour, based on a rolling 3-hour averaging period.

(20) 40 CFR Part 60.45Da(a) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date on which the initial performance test required to be conducted under §60.8 is completed, ***the Permittee*** shall not cause to be discharged into the atmosphere from **S2.003** any gases which contain mercury (Hg) emissions in excess of of each Hg emissions limit in paragraphs (i) through (iii) below on a 12-month rolling averaging period.

(i) For each coal-fired electric utility steam generating unit that burns only bituminous coal, ***the Permittee*** must not discharge into the atmosphere any gases from a new affected souce which contain Hg in excess of **20 x 10^{-6}** pound per megawatt hour (lb/MWh) or 0.020 lb/gigawatt-hour (GWh) on a gross output basis. The International System of Units (SI) equivalent is 0.0025 nanograms per joule (ng/J).

(ii) For each coal-fired electric utility steam generating unit that burns only sub-bituminous coal, if your unit is located in a county-level geographical area receiving less than or equal to 25 in/yr mean annual precipitation, based on the most recent publicly available U.S. Department of Agriculture 30-year data, ***the Permittee*** must not discharge into the atmosphere any gases from a new affected source which contain Hg in excess of **97 x 10^{-6}** lb/MWh or 0.097 lb/GWh on an output basis. The SI equivalent is 0.0122 ng/J.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(20) 40 CFR Part 60.45Da(a) *Federally Enforceable New Source Performance Standard Requirement* (Continued)

(iii) For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks (i.e., bituminous coal, sub-bituminous coal), ***the Permittee*** must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the monthly unit-specific Hg emissions limit established according to paragraph C.2.a.(20)(iii)(a) or (iii)(b) below:

(a) ***The Permittee*** must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the computed weighted Hg emissions limit based on the proportion of energy output (in British thermal units, Btu) contributed by each coal rank burned during the compliance period and its applicable Hg emissions limit in paragraphs C.2.a.(20)(i) and (ii) of this section as determined by Equation 1 of this section. ***The Permittee*** must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total Btu or megawatt hours contributed by all fuels burned during the compliance period.

Equation 1: $$EL_b = \frac{\sum_{i=1}^{n} EL_i * HH_i}{\sum_{i=1}^{n} HH_i}$$

Where:
EL_b is the total allowable Hg in lb/MWh that can be emitted to the atmosphere from any affected source being averaged under the blending provision.
EL_i is the Hg emissions limit for the subcategory i (coal rank) that applies to affected source, lb/MWh.
HH_i is the electricity output from **S2.003** during the production period related to use of the corresponding subcategory i (coal rank) that falls within the compliance period, gross MWh generated by **S2.003**.
n is the number of subcategories (coal ranks) averaged for an affected source.

(b) ***The Permittee*** must not discharge into the atmosphere any gases from the unit that contain Hg in excess of the computed weighted Hg emission limit based on the proportion of electricity output (in MWh) contributed by each coal rank burned during the compliance period and its applicable Hg emission limit in paragraphs C.2.a.(20)(i) and (ii) of this section as determined using Equation 1 of this section. ***The Permittee*** must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total megawatt hours contributed by both regulated and non-regulated fuels burned during the compliance period.

(21) NAC 445B.305 – The discharge of mercury to the atmosphere will not exceed **20×10^{-6} lb/MWh**, on a gross output basis, based on a rolling 12-month averaging period.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

a. Emission Limits (continued)

(22) NAC 445B.305 *BACT Emission Limit* – The discharge of fluorides (expressed as hydrogen fluoride) to the atmosphere will not exceed **9.7×10^{-4}** pound per million Btu, based on a rolling 3-hour averaging period.

(23) NAC 445B.305 – The discharge of hydrogen fluoride to the atmosphere will not exceed **5.04** pounds per hour, based on a rolling 3-hour averaging period.

(24) NAC 445B.305 – The discharge of HCL (hydrogen chloride) to the atmosphere will not exceed **10.8** pounds per hour, based on a rolling 3-hour averaging period.

(25) NAC 445B.305 *BACT Emission Limit* – The discharge of H_2SO_4 (sulfuric acid mist) to the atmosphere will not exceed **0.0034** pound per million Btu, based on a rolling 3-hour averaging period.

(26) NAC 445B.305 – The discharge of sulfuric acid mist to the atmosphere will not exceed **17.7** pounds per hour, based on a rolling 3-hour averaging period.

(27) SIP 445.721 *Federally Enforceable SIP* - The opacity from **S2.003** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.

(28) NAC 445B.22017 – The opacity from **S2.003** will not equal or exceed 20%. The opacity must be determined as set forth in 445B.22017.1(a) or (b). **S2.003** is allowed one 6-minute period per hour of not more than 27 percent opacity as set forth in 40 CFR part 60.42Da(b).

(29) 40 CFR Part 60.42Da(b) *Federally Enforceable New Source Performance Standard Requirement* - On and after the date the particulate matter performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(30) 40 CFR Part 60.48Da(c) *Federally Enforceable New Source Performance Standard Requirement* – The particulate matter emission standards under C.2.a.(5) of this section, the nitrogen oxides emission standards under C.2.a.(13) of this section and the Hg emission standards under C.2.a.(20) of this section apply at all times except during periods of startup, shutdown or malfunction.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

2. NAC 445B.3405

b. NAC 445B.305 BACT Emission Limits During Startup or Shutdown – During periods of startup or shutdown of **S2.003**, ***the Permittee*** shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.003**, the following pollutants in excess of the limits specified in this section. These emission limits apply on a rolling 24-hour average basis during conditions of startup or shutdown. Emissions not occurring during startup or shutdown conditions are excluded from the calculation of 24-hour average emissions for comparison with the startup or shutdown emission limits.

(1) NAC 445B.305 *BACT Emission Limit* – The discharge of SO_2 to the atmosphere will not exceed **1.2** pounds per million Btu.

(2) NAC 445B.305 *BACT Emission Limit* – The discharge of NO_x to the atmosphere will not exceed **0.45** pound per million Btu.

(3) NAC 445B.305 *BACT Emission Limit* – The discharge of CO to the atmosphere will not exceed **0.45** pound per million Btu.

(4) NAC 445B.305 *BACT Emission Limit* – The discharge of VOC to the atmosphere will not exceed **0.01** pound per million Btu. Since VOC is not monitored continuously, the continuously monitored CO emission rate serves as an indicator of combustion efficiency and a surrogate indicator of demonstrating compliance for VOC emissions. Compliance with the CO emission limit in C.2.b.(3) above will constitute compliance with the VOC emission limit in this condition.

(5) NAC 445B.305 *BACT Emission Limit* – The discharge of HF to the atmosphere will not exceed **0.019** pound per million Btu. Since HF is not monitored continuously, the continuously monitored SO_2 emission rate serves as an indicator of dry scrubber performance and a surrogate indicator demonstrating compliance for HF emissions. Compliance with the SO_2 emission limit in C.2.b.(1) above will constitute compliance with the HF emission limit in this condition.

(6) NAC 445B.305 *BACT Emission Limit* – The discharge of H_2SO_4 to the atmosphere will not exceed **0.05** pound per million Btu. Since H_2SO_4 is not monitored continuously, the continuously monitored SO_2 emission rate serves as an indicator of dry scrubber performance and a surrogate indicator demonstrating compliance for H_2SO_4 emissions. Compliance with the SO_2 emission limit in C.2.b.(1) above will constitute compliance with the H_2SO_4 emission limit in this condition.

(7) NAC 445B.305 *BACT Emission Limit* – Since baghouse operation is not affected by startup and shutdown, separate startup and shutdown emission limits for PM, PM_{10}, and Pb are not necessary. During startup and shutdown, ***the Permittee*** shall comply with the PM and PM_{10} emission limits in C.2.a.(4) of this section and the Pb emission limits in C.2.a.(18) of this section.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

3. NAC 445B.3405

Operating Parameters

a. During all periods except startups or shutdowns, **S2.003** will combust coal only. Allowable coal types include sub-bituminous and Western bituminous coals. During startup or shutdown periods, **S2.003** may combust ultra low-sulfur distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight, either alone or in combination with coal.

b. During normal operations (i.e., periods when startups, shutdowns or malfunctions do not occur), the maximum operating heat input rate for **S2.003** will not exceed **5,216** million Btu per any one-hour period. During startup periods when ultra low-sulfur distillate fuel, either alone or in combination with coal is combusted, the maximum operating heat input rate for **S2.003** will not exceed **1,356** million Btu per any one-hour period.

c. **S2.003** may operate a total of 8,760 hours per calendar year.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

a. **Compliance/Performance Testing**

Within 180 days of initial startup or within 60 days of achieving the maximum rate of production at **S2.003**, whichever is sooner, and after 7,000 hours of operation of additional operation following the initial testing, but not greater than 8,760 hours of additional operation after initial testing of **S2.003**, ***the Permittee*** shall:

(1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.003** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch. Compliance with the particulate matter standards contained in C.2.a.(1) through (4) shall be determined by using the dry basis F factor (O_2) procedures in Method 19 to compute the emissions rate. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of 160 ± 14^0C (320 ± 25^0F). For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points (40 CFR Part 60.50Da(b)). The daily coal sampling required in C.4.c.(4) of this section shall be performed during this test.

(2) Conduct and record a Method 201A and 202 performance test for PM_{10} on the exhaust stack of **S2.003** consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in C.4.a.(1) above. All particulate captured in the Method 5 test will be considered PM_{10} for compliance demonstration purposes.

(3) Conduct and record a Method 6 or 6C performance test for SO_2 on the exhaust stack of **S2.003** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C.

(4) Conduct and record a Method 25 or 25A performance test for VOC on the exhaust stack of **S2.003** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25 or 25A.

(5) Conduct and record a Method 29 performance test for Pb on the exhaust stack of **S2.003** consisting of three valid runs. The Method 29 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 29.

(6) Conduct and record a Method 26 performance test for HF and HCl on the exhaust stack of **S2.003** consisting of three valid runs. The Method 26 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 26.

(7) Conduct and record a Method 8 performance test for H_2SO_4 on the exhaust stack of **S2.003** consisting of three valid runs. The Method 8 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 8.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

a. **Compliance/Performance Testing (continued)**

(8) During the testing required in C.4.a.(1) of this section, Method 9 and the procedures in §60.11 shall be used to determine the opacity of the discharge from the exhaust stack of **S2.003.** The Method 9 opacity test must be conducted in accordance with the visible emissions evaluation procedures contained in 40 CFR Part 60, Appendix A, Method 9. A certified visible emissions reader must conduct the visible emissions evaluations for a period of at least 6 minutes. The opacity readings must be averaged such that compliance with both a 6-minute average and 2, 3-minute averages are determined (40 CFR Part 60.50Da(b)(3)).

(9) The performance tests will be conducted at the maximum operating heat input rate limit established in C.3.b. of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. ***The Permittee*** shall make available to the director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard (NAC 445B.252.3).

(10) ***The Permittee*** shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the performance test to allow the director to review the proposed testing procedures (NAC 445B.252.4). The alternative to the reference methods and procedures provided in 40 CFR Part 60.50Da(e) may be utilized to the extent that they are applicable to **S2.003**, and must be identified in the testing procedures as alternative methods.

(11) During each performance test required in C.4.a.(1) through (7) of this section, record the quantity (in tons) of coal combusted during each test run, the heat content value of the coal combusted during each test run (in Btu/ton) and include these data in the test results submitted. The emissions results of the Method 6 performance test for SO_2 must be converted to emissions of sulfur (both lb/hr and lb/MMBtu). The emissions results of the Method 5 or Method 201A and 202 performance test for PM_{10} must be reported in lb/MMBtu.

(12) As a result of the most recent performance test performed in C.4.a.(1) and (2) of this section, derive emission factors for each of the following:

(i) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable and condensable.
(ii) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable only.
(iii) Pounds of PM_{10} per ton of coal (lbs-PM_{10}/tons-coal), filterable and condensable.
(iv) Pounds of PM_{10} per ton of coal (lbs-PM_{10}/tons-coal), filterable only.

These emissions factors will be based on the average of the 3 test runs.

(13) Within 60 days after completing the performance tests and opacity observations contained in C.4.a. of this section, ***the Permittee*** shall furnish the director a written report of the results of the performance tests, the opacity observations and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3689 (NAC 445B.252.8).

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing**

Within 60 days after achieving the maximum production rate at which **S2.003** will be operated, but not later than 180 days after initial startup of **S2.003**, ***the Permittee*** shall:

(1) ***The Permittee*** will comply with the particulate matter standard in §60.42Da(c)(2) and shall demonstrate compliance with such standard according to the requirements in paragraphs (o)(1), (o)(2) and (o)(4) of 40 CFR Part §60.48Da. (§60.48Da(o), Compliance provisions; NSPS requirement). ***The Permittee*** shall:

(i) §60.48Da(o)(1) Conduct an initial performance test according to the requirements of §60.50Da to demonstrate compliance by the applicable date specified in §60.8(a) and thereafter, conduct the performance test **annually**, and

(ii) §60.48Da(o)(2) Use opacity monitoring equipment as an indicator of continuous particulate matter control device performance and demonstrate compliance with §60.42Da(b). In addition, baseline parameters shall be established as the highest hourly opacity averaged during the performance test. If any hourly average opacity measurement is more than 110 percent of the baseline level, the owner or operator will conduct another performance test within 60 days to demonstrate compliance. A new baseline is established during each stack test. The new baseline shall not exceed the opacity limit specified in §60.42Da(b), and

(iii) §60.48Da(o)(4) Install, calibrate, maintain and continuously operate a bag leak detection system according to paragraphs (i) through (viii) of §60.48Da(o)(4).

(2) ***The Permittee*** shall determine compliance with the particulate matter standards in §60.42Da as follows:

(i) §60.50Da(b)(1) The dry basis F factor (O_2) procedures in Method 19 shall be used to compute the emission rate of particulate matter.

(ii) §60.50Da(b)(2) For the particulate matter concentration, Method 5 shall be used.

(iii) §60.50Da(b)(2)(i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (325 ± 25 °F).

(iv) §60.50Da(b)(2)(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points.

(v) §60.50Da(b)(3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(vi) §60.50Da(e) ***The Permittee*** may use the following as alternatives to the reference methods and procedures specified in this section:

(1) §60.50Da(e)(1) For Method 5 or 5B, Method 17 may be used if the stack temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of §§2.1 and 2.3 of Method 5B may not be used in Method 17.

(2) §60.50Da(e)(2) The Fc factor (CO_2) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of §60.46(d)(1). The CO_2 shall be determined in the same manner as the O_2 concentration.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(3) ***The Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percent reduction option under §60.43Da is based on the average emission rates for sulfur dioxide and percent reduction for sulfur dioxide for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percentage reduction option under §60.43Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and a new percent reduction for sulfur dioxide are calculated to show compliance with the applicable standards.

(iii) §60.48Da(g) ***The Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(1) §60.48Da(g)(1) Compliance with applicable 30-day rolling average SO_2 emission limitation is determined by calculating the arithmetic average of all hourly emission rates for SO_2 for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

(2) §60.50Da(g)(2) Compliance with applicable SO_2 percentage reduction requirements is determined based on the average inlet and outlet SO_2 emission rates for the 30 successive boiler operating days.

(iv) §60.48Da(m) ***The Permittee*** shall calculate SO_2 emissions by multiplying the average SO_2 output concentration, measured according to the provisions of §60.49Da(b), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).

(4) As applicable, ***the Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows:

(i) §60.50Da(c)(1) The percent of potential SO_2 emissions ($\%P_s$) to the atmosphere shall be computed using the following equation:

$$\%P_s = [(100 - \%R_f)\ (100 - \%R_g)] / 100$$

Where:
$\%P_s$ = percent of potential SO_2 emissions, percent.
$\%R_f$ = percent reduction from fuel pre-treatment, percent.
$\%R_g$ = percent reduction by SO_2 control system, percent.

(ii) §60.50Da(c)(2) The procedures in Method 19 may be used to determine percent reduction ($\%R_f$) of sulfur by such processes as fuel pre-treatment (physical coal cleaning, hydro-de-sulfurization of fuel oil, etc.), coal pulverizers and bottom and fly ash interaction. This determination is optional.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(4) As applicable, ***the Permittee*** shall determine compliance with the SO_2 standards in §60.43Da as follows: (Continued)

(iii) §60.50Da(c)(3) The procedures in Method 19 shall be used to determine the SO_2 percent reduction ($\%R_g$) of any SO_2 control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO_2 control device and the average SO_2 input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.

(iv) §60.50Da(c)(4) The appropriate procedures in Method 19 shall be used to determine the emission rate of SO_2.

(v) §60.50Da(c)(5) The continuous monitoring system in §60.49Da(b) and (d) shall be used to determine the concentrations of SO_2 and CO_2 or O_2.

(5) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average SO_2 emission limitation under §60.43Da is determined by calculating the arithmetic average of all hourly emission rates for SO_2 for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(6) ***The Permittee*** shall determine compliance with the NO_x standards in §60.44Da as follows:

(i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitation under §60.44Da is based on the average emission rates for nitrogen oxides for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitations under §60.44Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for nitrogen oxides is calculated to show compliance with the applicable standards.

(iii) §60.48Da(g) The owner or operator of an affected facility subject to emission limitations in this subpart shall determine compliance as follows:

(1) §60.48Da(g)(1) Compliance with applicable 30-day rolling average NO_x emission limitation is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.

(iv) §60.48Da(i) ***The Permittee*** shall calculate NO_x emissions by multiplying the average hourly NO_x output concentration, measured according to the provisions of §60.49Da(c), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).

(7) ***The Permittee*** shall determine compliance with the NO_x standards in §60.44Da as follows:

(i) §60.50Da(d)(1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x.

(ii) §60.50Da(d)(2) The continuous monitoring system in §60.49Da(c) and (d) shall be used to determine the concentrations of NO_x and CO_2 or O_2.

(8) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average NO_x emission limitation under §60.44Da is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown and malfunction.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures:

(i) §60.50Da(h)(1) The initial performance test shall be commenced by the applicable date specified in §60.8(a). The required continuous monitoring systems must be certified prior to commencing the test. The performance test consists of collecting hourly Hg emission data (lb/MWh) with the continuous monitoring systems for 12 successive months of unit operation (excluding hours of unit startup, shutdown and malfunction). The average Hg emission rate is calculated for each month, and then the weighted, 12-month average Hg emission rate is calculated according to paragraph (h)(2) or (h)(3) of this section, as applicable. If, for any month in the initial performance test, the minimum data capture requirement in §60.49Da(p)(4)(i) is not met, the owner or operator shall report a substitute Hg emission rate for that month, as follows. For the first such month, the substitute monthly Hg emission rate shall be the arithmetic average of all valid hourly Hg emission rates recorded to date. For any subsequent month(s) with insufficient data capture, the substitute monthly Hg emission rate shall be the highest valid hourly Hg emission rate recorded to date. When the 12-month average Hg emission rate for the initial performance test is calculated, for each month in which there was insufficient data capture, the substitute monthly Hg emission rate shall be weighted according to the number of unit operating hours in that month. Following the initial performance test, the owner or operator shall demonstrate compliance by calculating the weighted average of all monthly Hg emission rates (in lb/MWh) for each 12 successive calendar months, excluding data obtained during startup, shutdown, or malfunction.

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average.

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in C.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in C.4.b.(9)(ii)(1)(C) of this section.

(A) §60.50Da(h)(2)(i)(A) If the Hg CEMS measures Hg concentration on a wet basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h$$

Where:

$\mathbf{E_h}$ = Hg mass emissions for the hour, (lb)

$\mathbf{K}$ = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

$\mathbf{C_h}$ = Hourly Hg concentration, wet basis, (µgm/scm)

$\mathbf{Q_h}$ = Hourly stack gas volumetric flow rate, (scfh)

$\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated. For example, $t_h = 0.50$ for a half-hour of unit operation and 1.00 for a full hour of operation.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in C.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in C.4.b.(9)(ii)(1)(C) of this section. (Continued)

(B) §60.50Da(h)(2)(i)(B) If the Hg CEMS measures Hg concentration on a dry basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h * (1 - B_{ws})$$

Where:

$\mathbf{E_h}$ = Hg mass emissions for the hour, (lb)

$\mathbf{K}$ = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

$\mathbf{C_h}$ = Hourly Hg concentration, dry basis, (µgm/dscm)

$\mathbf{Q_h}$ = Hourly stack gas volumetric flow rate, (scfh)

$\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated

$\mathbf{B_{ws}}$ = Stack gas moisture content, expressed as a decimal fraction (*e.g.*, for 8 percent H_2O, $B_{ws} = 0.08$)

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in C.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in C.4.b.(9)(ii)(1)(C) of this section. (Continued)

(C) §60.50Da(h)(2)(i)(C) Use the equation below, to calculate M, the total mass of Hg emitted for the month, by summing the hourly masses derived the equations in C.4.b.(9)(ii)(1)(A) or (B) of this section (as applicable):

$$M = \sum_{h=1}^{n} E_h$$

Where:

M = Total Hg mass emissions for the month, (lb)

$\mathbf{E_h}$ = Hg mass emissions for hour "h", from C.4.b.(9)(ii)(1)(A) or (B)of this section, (lb)

n = The number of unit operating hours in the month with valid CEM and electrical output data, excluding hours of unit startup, shutdown and malfunction

(2) §60.50Da(h)(2)(ii) Calculate the monthly Hg emission rate on an output basis (lb/MWh) using the equation below.

$$ER = \frac{M}{P}$$

Where:

ER = Monthly Hg emission rate, (lb/MWh)

M = Total mass of Hg emissions for the month, from Equation 4, above, (lb)

P = Total electrical output for the month, for the hours used to calculate M, (MWh)

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(9) ***The Permittee*** shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)

(ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)

(3) §60.50Da(h)(2)(iii) Until 12 monthly Hg emission rates have been accumulated, calculate and report only the monthly averages. Then, for each subsequent calendar month, use the equation below to calculate the 12-month rolling average as a weighted average of the Hg emission rate for the current month and the Hg emission rates for the previous 11 months, with one exception. Calendar months in which the unit does not operate (zero unit operating hours) shall not be included in the 12-month rolling average.

$$E_{avg} = \frac{\sum_{i=1}^{12} (ER)_i * n_i}{\sum_{i=1}^{12} n_i}$$

Where:

$\mathbf{E_{avg}}$ = Weighted 12-month rolling average Hg emission rate, (lb/MWh)

$\mathbf{(ER)_i}$ = Monthly Hg emission rate, for month "i", (lb/MWh)

n = The number of unit operating hours in month "i" with valid CEM and electrical output data, excluding hours of unit startup, shutdown, and malfunction

(iii) §60.50Da(h)(3) If a sorbent trap monitoring system is used in lieu of a Hg CEMS, as described in §75.15 of this chapter and in appendix K to Part 75 of this chapter, calculate the monthly Hg emission rates using the equations in C.4.b.(9)(ii)(1)(B) through C.4.b.(9)(ii)(2) of this section, except that for a particular pair of sorbent traps, C_h in the equation in C.4.b.(9)(ii)(1)(B) shall be the flow-proportional average Hg concentration measured over the data collection period.

(iv) §60.50Da(i) Daily calibration drift (CD) tests and quarterly accuracy determinations shall be performed for Hg CEMS in accordance with Procedure 1 of Appendix F to this Part. For the CD assessments, you may either use elemental mercury or mercuric chloride (Hg° or $HgCl_2$) standards. The four quarterly accuracy determinations shall consist of one relative accuracy test audit (RATA) and three measurement error (ME) tests using $HgCl_2$ standards, as described in section 8.3 of Performance Specification 12-A in Appendix B to this Part (note: Hg° standards may be used if the Hg monitor does not have a converter). Alternatively, the owner or operator may implement the applicable daily, weekly, quarterly and annual quality assurance (QA) requirements for Hg CEMS in Appendix B to Part 75 of this chapter, in lieu of the QA procedures in Appendices B and F to this Part. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with Appendices A and B to Part 75 of this chapter, and all other quality assurance requirements specified in Appendix K to Part 75 of this chapter shall be met for sorbent trap monitoring systems.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)

(10) §60.48Da(l) ***The Permittee*** shall calculate the Hg emission rate (lb/MWh) for each calendar month of the year, using hourly Hg concentrations measured according to the provisions of §60.49Da(p) in conjunction with hourly stack gas volumetric flow rates measured according to the provisions of §60.49Da(l) or (m), and hourly gross electrical outputs, determined according to the provisions in §60.49Da(k). Compliance with the applicable standard under §60.49Da is determined on a 12-month rolling average basis.

(11) ***The Permittee*** shall determine compliance with the opacity standard in 40 CFR §60.42Da(b) via continuous opacity monitoring in accordance with C.4.c.(16) and (17) of this section.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring**

The Permittee, upon startup of **S2.003**, will:

(1) Install, calibrate, operate and maintain mass measurement devices to continuously measure the amount of fuel combusted in **S2.003**. The mass measurement devices must be installed at appropriate locations in the fuel delivery system to accurately and continuously measure the following listed fuels combusted in **S2.003**:

(i) Coal (in tons)

(ii) Distillate Fuel (in pounds)

(2) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the quantities of fuel as measured by the fuel mass measurement devices required in C.4.c.(1) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications.

(3) Perform coal sampling of the coal prior to it entering the boiler. Sampling shall be conducted for moisture, ash, sulfur content and gross calorific value. Coal moisture, ash, sulfur content and gross calorific value will be recorded on 24-hour and 30-day rolling averaging periods. A coal analysis shall be performed daily and the results of these analyses shall be retained for at least two years following the date of the measurement. All sample collection, sample preparation, and analyses performed or caused to be performed shall be conducted according to the methods specified in C.4.c.(4) of this section and in accordance with the coal sampling and analysis plan prepared by WPEA and approved by the BAPC under C.4.c.(4) of this section.

(4) Perform coal sampling as required in C.4.c.(3) of this section according to Section 12.5.3.2.2 in Method 19 in Appendix A to Part 60 and the appropriate ASTM method. The appropriate ASTM methods will be used to determine the coal moisture, ash and sulfur contents. At least 90 days prior to startup of **S2.003**, ***the Permittee*** shall submit a coal sampling and analysis plan to the Nevada Bureau of Air Pollution Control (BAPC), detailing the procedures and equipment that will be used to obtain samples and analyze the coal, including the appropriate ASTM test methods that will be used for each parameter. The BAPC will review the coal sampling and analysis plan and approve the plan or request additional information within 30 days of receipt of the plan.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(5) Install, calibrate, operate and maintain a SO_2 continuous emissions monitor system (CEMS) (consisting of a SO_2 pollutant concentration monitor in conjunction with the flow monitoring device required in C.4.c.(26) of this section) to continuously measure the concentration of SO_2 (in ppm), percent reduction and SO_2 emission rate (in lb/hr, lb/MMBtu and lb/MWh) from **S2.003**. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.003** to accurately and continuously measure the SO_2 concentrations in **S2.003** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(b), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(6) Determine the removal efficiencies in C.2.a.(8) of this section via the following procedure: (BACT requirement)
(i) SO_2 emissions shall be monitored at the outlet of the SO_2 control device.
(ii) An "as-fired" fuel monitoring system shall be used to determine SO_2 emissions, in accordance with 40 CFR Part 60.49Da(b)(3).
(iii) Percent SO_2 removal shall be calculated on a rolling 30-day averaging period.
(iv) The procedures established in 40 CFR Part 60.49Da(i) shall be used to conduct monitoring system performance evaluations.

(7) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the SO_2 concentration (in ppm), SO_2 percent reduction (including percent reduction as measured in accordance with §60.49Da(b), as applicable, and determined in accordance with C.4.c.(6) of this section) and SO_2 emission rate (in lb/hr, lb/MMBtu and lb/MWh), as measured by the CEMS required in C.4.c.(5) of this section, on a 1-hour, 3-hour, 24-hour and 30-day periods. Percent SO_2 reduction will be determined on a rolling 30-day averaging period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da, 40 CFR Part 60, Appendix B, Performance Specifications, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(8) Divide the results of the 1-hour average for SO_2 emissions (in lb/hr), recorded in C.4.c.(7) of this section, by 2 to obtain the average Sulfur emissions in lb/hour.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(9) Install, calibrate, operate and maintain a NO_x continuous emissions monitor system (CEMS) (consisting of a NO_x pollutant concentration monitor in conjunction with the flow monitoring device required in C.4.c.(26) of this section) to continuously measure the concentration of NO_x (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh) from **S2.003**. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.003** to accurately and continuously measure the NO_x concentration in **S2.003** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(c), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F. If the owner or operator has installed a nitrogen oxides emission rate continuous emission monitoring system (CEMS) to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of §60.49Da(c), except that the owner or operator shall also meet the requirements of §60.51Da. Data reported to meet the requirements of §60.51Da shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter. The procedures established in 40 CFR Part 60.49Da(i) shall be used to conduct monitoring system performance evaluations.

(10) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the NO_x concentration (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh), as measured by the CEMS required in C.4.c.(9) of this section, on a 24-hour, 30-day and 12-month rolling period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(11) Install, calibrate, operate and maintain a continuous monitoring system for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. (40 CFR Part 60.49Da(d))

(12) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored (40 CFR Part 60.49Da(d)). The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267.

(13) Operate the continuous monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR Part 60.49Da(e))

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(14) Obtain emission data from the continuous emission monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide for at least 90 percent of all operating hours for each 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in paragraph §60.49Da(h). (40 CFR Part 60.49Da(f)(2))

(15) Use methods and procedures in §60.49Da(i) to conduct monitoring system performance evaluations under §60.13(c) and calibration checks under §60.13(d) for the continuous emission monitoring systems for NO_x, SO_2 and oxygen or carbon dioxide. Acceptable alternative methods and procedures are given in §60.49Da(j). (40 CFR Part 60.49Da(i))

(16) Install, calibrate, operate and maintain a continuous opacity monitoring system to continuously measure and record the opacity discharged from **S2.003**. The continuous opacity monitoring system will be installed at an appropriate location in the discharge stack of **S2.003** to accurately and continuously measure the opacity of **S2.003** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, and 40 CFR Part 75.10. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.

(17) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the opacity (in percent opacity) as measured by the continuous opacity monitoring system required in C.4.c.(16) of this section on a 3-minute average period and 6-minute average period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, 40 CFR Part 75.10 and 40 CFR Part 75.14.

(18) Install, calibrate, operate and maintain a CO continuous emissions monitor system (CEMS) (consisting of a CO pollutant concentration monitor in conjunction with the flow monitoring device required in C.4.c.(26) of this section) to continuously measure the concentration of CO (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu) from **S2.003**, on a rolling 24-hour averaging period. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.003** to accurately and continuously measure the CO concentration in **S2.003** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(19) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the CO concentration (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu), as measured by the CEMS required in C.4.c.(18) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(20) The owner or operator of an affected facility demonstrating compliance with an Hg limit in §60.45Da shall install and operate a Continuous Emissions Monitoring System (CEMS) to measure and record the concentration of Hg in the exhaust gases from each stack. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.003** to accurately and continuously measure the Hg concentration in **S2.003** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(p) and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

(21) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the Hg concentration (in ppm) and Hg emissions rate (in lb/MWh), as measured by the CEMS required in C.4.c.(20) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F .

(22) Within 180 days of initial startup of **S2.003**, ***the Permittee*** will assemble the information required in C.4.c.(24)(i) of this section such that the BAPC can evaluate the percent reductions established for SO_2 in C.2.a.(8)of this Section, based on actual performance of **S2.003**. The percent reductions will be adjusted according to the procedures outlined in C.4.c.(24)(ii) of this Section. ***The Permittee*** will provide the assembled information postmarked within 240 days of initial startup.

(23) ***The Permittee*** will provide the information required in C.4.c.(24)(i) of this section such that BAPC can re-evaluate the percent reductions values established for SO_2 in C.2.a.(8) of this Section within 180 days of any change in the rolling 30-day averaging period fuel sulfur content, as determined in C.4.c.(3) of this section, in excess of ±0.2%. The percent reductions will be adjusted according to the procedures outlined in C.4.c.(24)(ii) of this Section.

(24) Procedure for truing percent reductions values in Section C.2.a.(8) of this Section, as required by C.4.c.(22) or (23).

(i) ***The Permittee*** will provide actual performance of **S2.003** as determined by data gathered by the CEMS and fuel sulfur monitoring for the preceding 180 day period. Data shall consist of:

(a) As fired coal sulfur content on both a 24-hour and 30-day rolling period, as specified in C.4.c.(3) and (4) of this section.

(b) Actual SO_2 percent removal on a rolling 30-day averaging period, using the method specified in C.4.c.(6) of this section.

(c) Actual SO_2 emissions, in pounds per million BTU, on a rolling 24-hour averaging period, using the method specified in C.4.c.(5) of this section.

(ii) Within 60 days of the submittal required in C.4.c.(24)(i), the Bureau of Air Pollution Control (BAPC) will determine the basis to adjust the percent removal efficiencies in C.2.a.(8)(i)(b) and (ii)(b) as follows:

(a) BAPC will increase or decrease the percent SO_2 removal efficiency criteria in C.2.a.(8) of this section if the data show there is greater than a ±1.0% change in the SO_2 removal efficiency.

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. **Monitoring (continued)**

(25) The owner or operator of an affected facility with electricity generation shall install, calibrate, maintain and operate a wattmeter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor. (40 CFR § 60.49Da(k)).

(26) Install, certify, operate and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B and procedure 1 of Appendix F of 40 CFR Part 60, and record the output of the system, for measuring the flow of exhaust gases discharged to the atmosphere in accordance with 40 CFR§ 60.49Da(1). Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR §75.21, and validated according to 40 CFR §75.23, may be used. (40 CFR § 60.49Da(m)).

(27) All conversions from Btu/hr unit input to MW unit output must use equivalents found in 40 CFR 60.40(a)(1) for electric utilities. (40 CFR §60.50Da(g)(1)).

(28) Operate the continuous monitoring systems required under 40 CFR Part 60, Subpart Da and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR §60.49Da(e))

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **Recordkeeping**

The Permittee will maintain a contemporaneous log containing at a minimum, the following recordkeeping for each day, or part of a day that **S2.003** is operating:

(1) The total hourly quantity of:

i. Coal (in tons) combusted, for each hour of operation based on the data recorded by the CDCS as required in C.4.c.(2) of this section.

ii. Distillate fuel (in pounds) combusted, for each hour of operation based on the data recorded by the CDCS as required in C.4.c.(2) of this section.

(2) Daily hours of operation:

i. The total daily hours of operation for the corresponding date.

(3) The moisture, ash and sulfur content of the coal, as required in C.4.c.(3) of this section. The average heat content of the coal, in Btu/ton, combusted for the corresponding date. The heat content of the coal will be based on the gross calorific value determined in C.4.c.(3) of this section. The average heat content of the distillate fuel will be assumed equal to 19.200 Btu/lb.

(4) The average hourly heat input of the coal and/or distillate fuel in MMBtu per hour. The hourly heat inputs will be calculated from the hourly fuel usage rates recorded in C.4.d.(1) of this section, and the heat content of the fuel as recorded in C.4.d.(3) of this section.

Sample Calculation:
(tons-coal/hr)(Btu/ton-coal) = Btu/hr or MMBtu/hr
or
(lb-mass distillate fuel/hr)(Btu/lb-mass) = Btu/hr or MMBtu/hr

(5) The hourly emission rate of PM and PM_{10} each:

(i) In pounds per MMBtu (lbs/MMBtu). The hourly emission rates will be calculated from the heat content of the fuel determined in C.4.d.(3) of this section, and the emission factor derived in C.4.a.(11) of this section.

Sample Calculation:
(tons-coal/Btu)(lb/tons-coal) = lbs-PM/Btu or lbs-PM/MMBtu
(tons-coal/Btu)(lb/tons-coal) = lbs-PM_{10}/Btu or lbs-PM_{10}/MMBtu

(ii) In pounds per hour (lbs/hr). The hourly emission rates will be calculated from the hourly tonnage of coal combusted, as determined in C.4.d.(1) of this section, and the emission factor derived in C.4.a.(11) of this section.

Sample Calculation:
(tons-coal/hour)(lb/tons-coal) = lbs-PM/hr
(tons-coal/hr)(lb/tons-coal) = lbs-PM_{10}/Btu

Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 - Pulverized Coal Fired Utility Boiler (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **Recordkeeping (continued)**

(6) The emission rates of sulfur and SO_2 each, in pounds per hour (lbs/hr) and pounds per million Btu (lbs/MMBtu) measured by the CEMS required in C.4.c.(5) of this section; and the "as fired" fuel monitoring required in C.4.c.(6)(ii) of this section, for each averaging period described below:

(i) The sulfur emissions in pounds per hour (lbs/hr) for each 1-hour period. Sulfur emissions will be one-half of the SO_2 emissions measured.

(ii) The Sulfur and SO_2 emissions in pounds per million Btu (lbs/MMBtu)

(iii) The percent reduction levels required in C.2.a.(10) of this section on a rolling 30-day averaging period. (NSPS Subpart Da requirement)

(iv) The percent reduction levels required in C.2.a.(8) of this section on a rolling 30-day averaging period. (BACT requirement)

The compliance determination procedures established in 40 CFR Part 60.50Da(c) will be used to convert the continuous monitoring data into units of the applicable standards (lb/MMBtu and lb/hr, 3-hour, 24-hour and 30-day rolling average periods and percent reduction).

(7) The hourly emissions rate of NO_x in pounds per million Btu (lbs/MMBtu) for each 30-day rolling averaging period measured by the CEMS required in C.4.c.(9) of this section. The compliance determination procedures established in 40 CFR Part 60.50Da(d) will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, 24-hour, 30-day, annual rolling average periods).

(8) The recorded opacity (in percent opacity) from the continuous opacity CDCS system required in C.4.c.(17) of this section. The opacity will be determined from reducing all data from the successive 10-second readings and recorded for the following:

(i). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in NAC 445B.22017.1(b) and as set forth in 40 CFR Part 60.13(h).

(ii). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in 40 CFR Part 60.42Da(b).

(9) The emissions rate of CO in pounds per million Btu (lbs/MMBtu) and pounds per hour (lbs/hr) recorded by the CDCS required in C.4.c.(19) of this section. The compliance determination procedures established in 40 CFR Part 60.48Da will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, lb/hr and 24-hour rolling average periods).

(10) New Source Performance Standards (NSPS) - Notification and Record Keeping (40 CFR Part 60.7(b))
Permittee, upon the issuance date of this permit shall:

(1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

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Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section V. Specific Operating Conditions

D. Emission Unit #S2.004 – Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler. *UTM: North 4,399.161 km, East 691.238 km (Zone 11)*

System 04 – Ultra Low Sulfur Distillate Fuel -Fired Auxiliary Boiler
S2.004 ***Auxiliary Boiler****, Manufacturer TBD, Model # TBD, Serial # TBD, Unit Manufactured TBD. 367.0 million Btu/hr - Maximum Heat Input Rate*

1. NAC 445B.3405
   Air Pollution Equipment
   a. Emissions from **S2.004** shall be controlled by the following combustion practices. The following control technologies shall be utilized to minimize the formation of NO_x during the combustion process:
      (1) Low NO_x Burner.
      (2) Flue Gas Recirculation.

   b. Stack Parameters
      Height: 225.0 ft
      Diameter: 7.24 ft
      Stack Temperature: 670 ^oF
      Velocity: 60.0 ft/sec
      Volume Flow: 67,554 DSCFM

2. NAC 445B.3405
   Emission Limits
   a. On and after the date of startup of **S2.004**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.004**, the following pollutants in excess of the following specified limits:
      (1) NAC 445B.305 – The discharge of PM (particulate matter), filterable and condensable, to the atmosphere will not exceed **18.4** pounds per hour, based on a 3-hour averaging period. The discharge of PM_{10} (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere will not exceed **18.4** pounds per hour, based on a 3-hour averaging period.

      (2) NAC 445B.2203 – The discharge of PM_{10}, filterable and condensable, to the atmosphere will not exceed **0.26** pound per million Btu, based on a 3-hour averaging period.

      (3) SIP 445.731 *Federally Enforceable SIP* – The discharge of PM, filterable and condensable, to the atmosphere will not exceed **0.26** pound per million Btu, based on a 3-hour averaging period.

      (4) NAC 445B.305 *BACT Emission Limit* – The discharge of PM, filterable and condensable, to the atmosphere will not exceed **0.05** pound per million Btu, based on a 3-hour averaging period. The discharge of PM_{10}, filterable, to the atmosphere will not exceed **0.05** pound per million Btu, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

2. NAC 445B.3405
   a. Emission Limits (continued)
      (5) NAC 445B.305 – The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period.

      (6) NAC 445B.305 *BACT Emission Limit* – The discharge of SO_2 to the atmosphere will not exceed **1.6×10^{-3}** pound per million Btu, based on a 3-hour averaging period.

      (7) NAC 445B.22047(3) – The discharge of sulfur to the atmosphere will not exceed **146.8** pounds per hour, based on a 3-hour averaging period.

      (8) Article 8.2.1.2 *Federally Enforceable SIP* - The discharge of sulfur to the atmosphere will not exceed **146.8** pounds per hour, based on a 3-hour averaging period.

      (9) NAC 445B.305 *BACT Emission Limit* – The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.1** pound per million Btu, based on a 3-hour averaging period.

      (10) NAC 445B.305 – The discharge of NO_x to the atmosphere will not exceed **37.0** pounds per hour, based on a 3-hour averaging period.

      (11) NAC 445B.305 *BACT Emission Limit* – The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.04** pound per million Btu, based on a 3-hour averaging period.

      (12) NAC 445B.305 – The discharge of CO to the atmosphere will not exceed **15.0** pounds per hour, based on a 3-hour averaging period.

      (13) NAC 445B.305 – The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **1.10** pounds per hour, based on a 3-hour averaging period.

      (14) NAC 445B.305 *BACT Emission Limit* – The discharge of VOC to the atmosphere will not exceed **0.003** pound per million Btu, based on a 3-hour averaging period.

      (15) NAC 445B.305 *BACT Emission Limit* – The discharge of H_2SO_4 (sulfuric acid mist) to the atmosphere will not exceed **6.0×10^{-5}** pound per million Btu, based on a 3-hour averaging period.

      (16) NAC 445B.305 – The discharge of sulfuric acid mist to the atmosphere will not exceed **0.022** pound per hour, based on a 3-hour averaging period.

      (17) SIP 445.721 *Federally Enforceable SIP* - The opacity from **S2.004** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour.

      (18) NAC 445B.22017 – The opacity from **S2.004** will not equal or exceed 20%. The opacity must be determined as set forth in 445B.22017.1(a) or (b).

Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

2. NAC 445B.3405
   Emission Limits (continued)
   b. *Federally Enforceable National Emission Standards for Hazardous Air Pollutants Requirements.* **S2.004** is classified as a new limited use liquid fuel unit under 40 CFR Part 63, Subpart DDDDD, and ***the Permittee*** must therefore comply with the following requirements upon startup (40 CFR §63.7495(a)):

      (1) 40 CFR Part 63.7500(a) ***The Permittee*** must comply with the following applicable emission limits: **S2.004** shall not cause to be discharged into the atmosphere any gases which contain filterable particulate matter in excess of **0.03** lb/MMBtu of heat input or HCl in excess of **0.0009** lb/MMBtu of heat input. Per §63.7506(a), ***the Permittee*** is not required to conduct a performance test to demonstrate compliance with these emission limits and is not required to set and maintain operating limits to demonstrate continuous compliance with the emission limits.

      (2) 40 CFR Part 63.7500(a) ***The Permittee*** must comply with the following applicable work practice standard: **S2.004** shall not cause to be discharged into the atmosphere any gases which contain carbon monoxide in excess of **400.0** ppmvd, corrected to 3% O_2.

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

3. NAC 445B.3405

Operating Parameters

a. **S2.004** will only combust distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight.
b. **S2.004** will not operate more than **500.0** hours per year, based on a 12-month rolling period.
c. The maximum operating heat input rate for **S2.004** will not exceed **367.0** million Btu per any one-hour period.
d. The maximum allowable distillate fuel consumption rate for **S2.004** will not exceed **2,644.0** gallons per hour.

Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Monitoring and Record keeping

a. The Permittee, upon issuance of this operating permit will:

(1) Monitor and record the total consumption of distillate fuel for **S2.004** on a daily basis, for each day or part of a day that **S2.004** is operating.

(2) Monitor and record the hours of operation for **S2.004** on a daily basis, for each day or part of a day that **S2.004** is operating.

(3) Conduct and record a visible emission inspection on the exhaust stack of **S2.004**, for each day, or part of a day that **S2.004** is operating; record the time of the survey and indicate whether any visible emission was observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

(4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.004** is operating:

(i) The calendar date of any required monitoring.
(ii) The total daily hours of operation for the corresponding date.
(iii) The total daily fuel consumption rate of distillate fuel, in gallons, for the corresponding date.
(iv) The corresponding average hourly fuel consumption rate of distillate fuel, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (ii) and (iii) above.
(v) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
   b. **Compliance/Performance Testing**
   Within **100.0** operating hours of the notification of initial startup of **S2.004**, as required in Section II.A.3, ***the Permittee*** shall:
   (1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.004** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch.

   (2) Conduct and record a Method 201A and 202 performance test for PM_{10} on the exhaust stack of **S2.004** consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in D.4.b.(1) above. All particulate captured in the Method 5 test will be considered PM_{10} for compliance demonstration purposes. The sample time for each test run shall be at least 60 minutes. The sample volume for each test run shall be at least 60 dry standard cubic feet per minute (dscfm).

   (3) Conduct and record a Method 7E performance test for NO_x on the exhaust stack of **S2.004** consisting of three valid runs. The Method 7E emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 7E.

   (4) Conduct and record a Method 10 performance test for CO on the exhaust stack of **S2.004** consisting of three valid runs. The Method 10 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 10.

   (5) Conduct and record a Method 25 performance test for VOC on the exhaust stack of **S2.004** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25.

   (6) Conduct and record a Method 6 performance test for SO_2 on the exhaust stack of **S2.004** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6. To determine the sulfur emission rate, ***the Permittee*** shall divide the SO_2 emission rate by 2.

   (7) Conduct and record Method 8 performance test for H_2SO_4 on the exhaust stack of **S2.004** consisting of three valid runs. The Method 8 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 8.

   (8) During one of the three test runs required in D.4.b.(1) or (2) of this section, conduct and record a Method 9 visual opacity observation of the discharge from the exhaust stack of **S2.004.** The Method 9 opacity test must be conducted in accordance with the visible emissions evaluation procedures contained in 40 CFR Part 60, Appendix A, Method 9. A certified visible emissions reader must conduct the visible emissions evaluations for a period of at least 6 minutes. The opacity readings must be averaged such that compliance with both a 6-minute average and 2, 3-minute averages are determined.

Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Compliance, Monitoring, Recordkeeping and Reporting (continued)
   b. **Compliance/Performance Testing** (Continued)
      (9) The performance tests will be conducted at the maximum operating heat input rate limit established in D.3.c of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. ***The Permittee*** shall make available to the director such records as may be necessary to determine the conditions of the performance test. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a performance test unless otherwise specified in the applicable standard (NAC 445B.252.3).

      (10) ***The Permittee*** shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the test of performance to allow the director to review the proposed testing procedures (NAC 445B.252.4). Alternatives to the reference methods and procedures provided in D.4.b. of this section may be utilized to the extent that they are applicable to **S2.004**, and must be identified in the testing procedures as alternative methods.

      (11) During each performance test required in D.4.b.(1) through (7) of this section, record the quantity (in gallons) of distillate fuel combusted during each test run, the heat content value of the distillate fuel combusted during each test run (in Btu/gallon) and include these data in the test results submitted.

      (12) Within 60 days after completing the performance tests and opacity observations contained in D.4.b. of this section, ***the Permittee*** shall furnish the director a written report of the results of the performance tests, the opacity observations and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3689 (NAC 445B.252.8).

Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

c. **NSPS Subpart Db Compliance –** Since **S2.004** will combust only distillate fuel that contains less than 0.3% sulfur by weight, **S2.004** is not subject to the SO_2, PM, or opacity limits in 40 CFR Part 60, Subpart Db (per 40 CFR §60.42b(k)(1), §60.43b(h)(5), and 71 FR 9868). Additionally, since **S2.004** is subject to a federally enforceable requirement that limits operation to an annual capacity factor of 10 percent (0.10) or less, **S2.004** is not subject to the NO_X limits in 40 CFR Part 60, Subpart Db (per 40 CFR §60.44b(l)(1)). However, **S2.004** is subject to the NSPS Subpart Db compliance requirements listed below:

(1) ***The Permittee*** shall submit a notification of the date construction of **S2.004** is commenced postmarked no later than 30 days after such date. (40 CFR §60.7(a)(1))

(2) ***The Permittee*** shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include the following: (40 CFR §60.49b(a))

(i) The design heat input capacity of **S2.004** and identification of the fuels to be combusted in the **S2.004**. (40 CFR §60.49b(a)(1))

(ii) A copy of the Federally enforceable requirement that limits the annual capacity factor for any fuel, and (40 CFR §60.49b(a)(2))

(iii) The annual capacity factor at which ***the Permittee*** anticipates operating the facility. (40 CFR §60.49b(a)(3))

(3) ***The Permittee*** shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. (40 CFR §60.49b(d))

(4) ***The Permittee*** shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in §60.41b. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the reporting period. (40 CFR §60.49b(r))

(5) The reporting period for the reports required under Subpart Db is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. (40 CFR §60.49b(w))

(6) ***The Permittee*** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction of **S2.004**; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR §60.7(b))

(7) All records required under this section shall be maintained by ***the Permittee*** for a period of 2 years following the date of such record. (40 CFR §60.49b(o))

Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **NESHAP Subpart DDDDD Compliance/Performance Testing – S2.004** *is a limited use liquid fuel unit under 40 CFR Part 63, Subpart DDDDD, and* ***the Permittee*** *must comply with the following compliance, monitoring, recordkeeping, and reporting provisions for* **S2.004** *pursuant to Subpart DDDDD:*

(1) ***The Permittee*** must comply with the applicable provisions of 40 CFR Part 63, Subpart DDDDD and Subpart A upon startup of **S2.004**. (40 CFR §63.7495(a))

(2) ***The Permittee*** is not required to conduct a performance test to demonstrate compliance with the emission limits in D.2.b.(1) of this section. ***The Permittee*** is not required to set and maintain operating limits to demonstrate continuous compliance with the emission limits. However, ***the Permittee*** must meet the requirements in paragraphs (i) and (ii) of this condition and meet the CO work practice standard in D.2.b.(2) of this section. (40 CFR §63.7506(a))

(i) To demonstrate initial compliance, ***the Permittee*** must include a signed statement in the Notification of Compliance Status report required in §63.7545(e) that indicates ***the Permittee*** burns only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels. (40 CFR §63.7506(a)(1))

(ii) To demonstrate continuous compliance with the applicable emission limits, ***the Permittee*** must also keep records that demonstrate that ***the Permittee*** burns only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels. ***The Permittee*** must also include a signed statement in each semiannual compliance report required in §63.7550 that indicates ***the Permittee*** burned only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, during the reporting period. (40 CFR §63.7506(a)(2))

(3) Startup, Shutdown, and Malfunction. ***The Permittee*** must comply with the following general requirements for startup, shutdown, and malfunction periods:

(i) At all times, including periods of startup, shutdown, and malfunction, ***the Permittee*** must operate and maintain **S2.004**, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. This general duty to minimize emissions requires that ***the Permittee*** reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require ***the Permittee*** to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require ***the Permittee*** to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan), review of operation and maintenance records, and inspection of the source. (40 CFR §63.6(e)(1)(i))

(ii) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, ***the Permittee*** must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices. (40 CFR §63.6(e)(1)(ii))

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **NESHAP Subpart DDDDD Compliance/Performance Testing (continued)**

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards. (40 CFR §63.6(e)(1)(iii))

(4) Startup, Shutdown, and Malfunction Plan. ***The Permittee*** must comply with the following requirements associated with the startup, shutdown, and malfunction plan:

(i) ***The Permittee*** must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining **S2.004** during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. (40 CFR §63.6(e)(3)(i))

(ii) When actions taken by ***the Permittee*** during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, ***the Permittee*** must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, ***the Permittee*** must keep records of these events as specified in paragraph §63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, ***the Permittee*** shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual startup, shutdown, and malfunction report required in §63.10(d)(5). (40 CFR §63.6(e)(3)(iii))

(iii) If an action taken by ***the Permittee*** during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then ***the Permittee*** must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with §63.10(d)(5) (unless ***the Permittee*** makes alternative reporting arrangements, in advance, with the Administrator). (40 CFR §63.6(e)(3)(iv))

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **NESHAP Subpart DDDDD Compliance/Performance Testing (continued)**

(iv) ***The Permittee*** must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised, ***the Permittee*** must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of 40 CFR Part 63, ***the Permittee*** must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that ***the Permittee*** submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of ***the Permittee***. Upon receipt of such a request, ***the Permittee*** must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. ***The Permittee*** may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If ***the Permittee*** claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR §2.301, the material which is claimed as confidential must be clearly designated in the submission. (40 CFR §63.6(e)(3)(v))

(v) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, ***the Permittee*** may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator. (40 CFR §63.6(e)(3)(vi))

(vi) ***The Permittee*** may periodically revise the startup, shutdown, and malfunction plan for **S2.004** as necessary to satisfy the requirements of 40 CFR Part 63 or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, ***the Permittee*** may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by §63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time ***the Permittee*** developed the plan, ***the Permittee*** must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that ***the Permittee*** makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after ***the Permittee*** has provided a written notice describing the revision to the permitting authority. (40 CFR §63.6(e)(3)(viii))

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **NESHAP Subpart DDDDD Compliance/Performance Testing (continued)**

(5) ***The Permittee*** must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. (40 CFR §63.7545(c))

(6) ***The Permittee*** must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source. (40 CFR §63.7510(g))

(7) ***The Permittee*** must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. (40 CFR §63.7545(d))

(8) ***The Permittee*** must conduct all performance tests according to §63.7(c), (d), (f), and (h). ***The Permittee*** must also develop a site-specific test plan according to the requirements in §63.7(c). (40 CFR §63.7520(a)

(9) Since **S2.004** is has an applicable work practice standard for CO and is in a limited use subcategory, the initial compliance demonstration is conducting a performance test for carbon monoxide according to Table 5 of Subpart DDDDD. (40 CFR §63.7510(c)) Ongoing compliance is demonstrated by annual performance tests for CO according to §63.7520. Each annual performance test must be conducted between 10 and 12 months after the previous performance test. (40 CFR §63.7515(e)) The Table 5 compliance testing requirements are as follows:

(i) To select the sampling ports location and the number of traverse points, use Method 1 in 40 CFR Part 60, Appendix A.

(ii) To determine oxygen and carbon dioxide concentrations of the stack gas, use Method 3A or 3B in 40 CFR Part 60, Appendix A, or ASTM D6522-00 (IBR, see §63.14(b)), or ASME PTC 19, Part 10 (1981) (IBR, see §63.14(i)).

(iii) To measure the moisture content of the stack gas, use Method 4 in 40 CFR Part 60, Appendix A.

(iv) To measure the carbon monoxide emission concentration, use Method 10, 10A, or 10B in 40 CFR Part 60, Appendix A.

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **NESHAP Subpart DDDDD Compliance/Performance Testing (continued)**

(10) ***The Permittee*** must conduct performance tests at the maximum normal operating load, and ***the Permittee*** must demonstrate initial compliance based on these tests. (40 CFR §63.7520(d))

(11) ***The Permittee*** may not conduct performance tests during periods of startup, shutdown, or malfunction. (40 CFR §63.7520(e))

(12) ***The Permittee*** must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour. (40 CFR §63.7520(f))

(13) ***The Permittee*** must report the results of performance tests within 60 days after the completion of the performance tests. The reports for all subsequent performance tests should include all applicable information required in §63.7550. (40 CFR §63.7515(g))

(14) ***The Permittee*** must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For each initial compliance demonstration, ***the Permittee*** must submit the Notification of Compliance Status, including all performance test results, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified §63.7545(e)(1) through (9), as applicable. (40 CFR §63.7545(e))

(15) ***The Permittee*** must report each instance in which ***the Permittee*** did not meet each applicable emission limit and work practice standard in Tables 1 through 4 of Subpart DDDDD. ***The Permittee*** must also report each instance during a startup, shutdown, or malfunction when ***the Permittee*** did not meet each applicable emission limit and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7550. (40 CFR §63.7540(b))

(16) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if ***the Permittee*** demonstrates to the EPA Administrator's satisfaction that ***the Permittee*** was operating in accordance with §63.6(e)(1). The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e). (40 CFR §63.7540(d))

(17) ***The Permittee*** must submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply by the dates specified. (40 CFR §63.7545(a))

(18) Since **S2.004** has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and therefore the unit is in one of the limited use subcategories (the limited use liquid fuel subcategory), the Initial Notification must include the information required by §63.9(b)(2) and also a signed statement indicating the affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent. (40 CFR §63.7545(b)(2))

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **NESHAP Subpart DDDDD Compliance/Performance Testing (continued)**

(19) ***The Permittee*** must submit the following reports as required in Table 9 of Subpart DDDDD: (40 CFR §63.7550(a))

(i) ***The Permittee*** must submit a Compliance Report semiannually according to the requirements in §63.7550(b). The report must contain the following:

(A) The information required in §63.7550(c)(1) through (11);

(B) If there are no deviations from any applicable emission limitation, a statement that there were no deviations from the emission limitations during the reporting period;

(C) If there is a deviation from any emission limitation or work practice standard during the reporting period, the information in §63.7550(d);

(D) If there was a startup, shutdown, or malfunction during the reporting period and ***the Permittee*** took actions consistent with the startup, shutdown, and malfunction plan, the information in §63.10(d)(5)(i).

(ii) If ***the Permittee*** had a startup, shutdown, or malfunction during the reporting period for which ***the Permittee*** did not take action consistent with the startup, shutdown, and malfunction plan and for which **S2.004** exceeds any applicable emission limitation, ***the Permittee*** must report by fax or telephone within 2 working days after starting actions inconsistent with the plan:

(A) Actions taken for the event; and

(B) The information in §63.10(d)(5)(ii).

(20) Unless the EPA Administrator approves a different schedule for submission of reports under §63.10(a), ***the Permittee*** must submit each Compliance Report according to the following requirements: (40 CFR §63.7550(b))

(i) §63.7550(b)(1) The first compliance report must cover the period beginning on the compliance date that is specified for the affected source in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for the source in §63.7495.

(ii) §63.7550(b)(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for the source in §63.7495.

(iii) §63.7550(b)(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iv) §63.7550(b)(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(21) Since **S2.004** will not use a continuous monitoring system under Subpart DDDDD, for each deviation from an emission limit or work practice standard in Subpart DDDDD that occurs, the compliance report must contain the information in §63.7550(c)(1) through (10) and the information required in §63.7550(d)(1) through (4). This includes periods of startup, shutdown, and malfunction. (40 CFR §63.7550(d))

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Section V. Specific Operating Conditions (continued)

D. Emission Unit #S2.004 (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **NESHAP Subpart DDDDD Compliance/Performance Testing (continued)**

(22) ***The Permittee*** must the following records: (40 CFR §63.7555(a))

(i) §63.7555(a)(1) A copy of each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted, according to the requirements in §63.10(b)(2)(xiv).

(ii) §63.7555(a)(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(iii) §63.7555(a)(3) Records of performance tests as required in §63.10(b)(2)(viii).

(23) ***The Permittee*** must keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). (40 CFR §63.7560(a))

(24) As specified in §63.10(b)(1), ***the Permittee*** must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR §63.7560(b))

(25) ***The Permittee*** must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). ***The Permittee*** may keep the records off site for the remaining 3 years. (40 CFR §63.7560(c))

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Section V. Specific Operating Conditions (continued)

E. Emission Units* PF1.001 through PF1.003 – *Fugitive Coal Handling Operations, Coal Rail Car Unloading.

UTM: North 4,399.120 km, East 690.904 km (Zone 11)

System 05	***Coal Rail Car Unloading Operations***
PF1.001	***Rail Car transfer of coal to Hoppers 1A, 1B, 1C and 1D***
PF1.002	***Hoppers transfer to Short Conveyor***
PF1.003	***Short Conveyor transfer to Stack-out Conveyor #1***

1. NAC 445B.3405

   Air Pollution Control Equipment

   Emissions from **PF1.001** shall be controlled by fogging water sprays and a partial enclosure. Emissions from **PF1.002 and PF1.003** shall be controlled by a partial enclosure located at **PF1.002 and PF1.003, each** and by the water sprays located at **PF1.001**.

2. NAC 445B.3405

   Emission Limits

   On and after the date of startup of **PF1.001 through PF1.003**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.001 through PF1.003**, the following pollutants in excess of the following specified limits:

   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.001** will not exceed **0.68** pound per hour. The discharge of **PM** to the atmosphere from **PF1.001** will not exceed **0.71** ton per year, based on a rolling 12-month averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by E.3.a of this section.

   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.001** will not exceed **0.24** pound per hour. The discharge of **PM_{10}** to the atmosphere from **PF1.001** will not exceed **0.25** ton per year, based on a rolling 12-month averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by E.3.a of this section.

   (3) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.002** will not exceed **0.39** pound per hour. The discharge of **PM** to the atmosphere from **PF1.002** will not exceed **0.41** ton per year, based on a rolling 12-month averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by E.3.a of this section.

   (4) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.002** will not exceed **0.14** pound per hour. The discharge of **PM_{10}** to the atmosphere from **PF1.002** will not exceed **0.15** ton per year, based on a rolling 12-month averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by E.3.a of this section.

   5) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.003** will not exceed **0.39** pound per hour. The discharge of **PM** to the atmosphere from **PF1.003** will not exceed **0.41** ton per year, based on a rolling 12-month averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by E.3.a of this section.

   (6) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.003** will not exceed **0.14** pound per hour. The discharge of **PM_{10}** to the atmosphere from **PF1.003** will not exceed **0.15** ton per year, based on a rolling 12-month averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by E.3.a of this section.

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Section V. Specific Operating Conditions (continued)

E. Emission Units* PF1.001 through PF1.003 – *Fugitive Coal Handling Operations, Coal Rail Car Unloading. (continued)

2. NAC 445B.3405
   Emission Limits
   On and after the date of startup of **PF1.001 through PF1.003**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.001 through PF1.003**, the following pollutants in excess of the following specified limits: (Continued)
   a. (13) SIP 445.721 *Federally Enforceable SIP Requirement* – The opacity from **PF1.001 through PF1.003** each, will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
   (14) NAC 445B.22017 – The opacity from **PF1.001 through PF1.003** each, will not equal or exceed 20% in accordance with NAC 445B.22017.

   b. New Source Performance Standards - Subpart Y - Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **PF1.001 through PF1.003** will be operated, but not later than 180 days after initial startup, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from **PF1.001 through PF1.003** the following pollutants in excess of the following specified limits:
   (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
   (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
   (3) At all times, including periods of startup, shutdown, and malfunction, ***the Permittee*** shall, to the extent practicable, maintain and operate **PF1.001 through PF1.003** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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Section V. Specific Operating Conditions (continued)

E. Emission Units* PF1.001 through PF1.003 – *Fugitive Coal Handling Operations, Coal Rail Car Unloading. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **System 5** will not exceed **4,000.0** tons of coal per any one-hour period.
   b. Maximum allowable throughput rate for **System 5** will not exceed **8,359,116** tons of coal per 12-month rolling period.
   c. **System 5** may operate 8,760 hours per year.
   d. *BACT Requirement* - Emissions from **PF1.001** shall be controlled by fogging water sprays and a partial enclosure. Emissions from **PF1.002 and PF1.003** shall be controlled by a partial enclosure located at **PF1.002 and PF1.003, each** and by the water sprays located at **PF1.001**.

4. NAC 445B.3405
   a. Monitoring and Recordkeeping
      Upon commencement of operations, ***Permittee will***:
      (1) Monitor and record the weight rate of each batch or charge load of coal to **System 05** on a daily basis:
         (i) Monitor and record weight of coal unloaded from rail car at **PF1.001**.
         (ii) Monitor and record the total weight of coal transferred to **PF1.002 and PF1.003**.

      (2) Monitor and record the hours of operation of **PF1.001 through PF1.003 each,** on a daily basis.

      (3) Conduct and record a weekly visible emission inspection on **PF1.001 through PF1.003 each,** while **System 05** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

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Section V. Specific Operating Conditions (continued)

E. Emission Units* PF1.001 through PF1.003 – *Fugitive Coal Handling Operations, Coal Rail Car Unloading. (continued)

5. NAC 445B.3405
   a. **NSPS Subpart Y Compliance Requirements – *The Permittee*** shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:

   (1) ***The Permittee*** shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))

   (2) ***The Permittee*** shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))

   (3) ***The Permittee*** shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))

   (4) ***The Permittee*** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 05**. (40 CFR §60.7(b))

   (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))

   (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. ***The Permittee*** shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))

   (7) Except as provided in E.5.a.(8) of this section, ***the Permittee*** shall conduct opacity observations in accordance with E.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of ***the Permittee*** to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))

   (8) ***The Permittee*** may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. ***The Permittee*** shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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Section V. Specific Operating Conditions (continued)

F. Emission Units* S2.005 and S2.006 – *Coal Handling Operations, Emergency Coal Pile Reclaim.

UTM: North 4,399.432 km, East 690.707 km (Zone 11)

System 06	***Emergency Coal Pile Reclaim Operations***
S2.005	***Transfer of Coal to Emergency Reclaim Hopper***
S2.006	***Transfer of Coal from Emergency Reclaim Hopper to Emergency Pile Conveyor***

1. NAC 445B.3405

   Air Pollution Control Equipment

   a. Emissions from **S2.005 and S2.006 each,** shall be ducted to a control system consisting of a **Fabric Filter (S08)** with 100% capture and a maximum volume flow rate of **3,320** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	10.0 ft
Stack Diameter:	1.0 ft
Stack Velocity:	70.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	3,320 dscfm

2. NAC 445B.3405

   Emission Limits

   On and after the date of startup of **S2.005 and S2.006**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Fabric Filter (S08)**, the following pollutants in excess of the following specified limits

   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.28** pound per hour, based on a 3-hour averaging period. This limit is less than the **86.90** pounds per hour maximum allowable emission limit as determined from NAC 445B.732 and the maximum allowable throughput as limited by F.3.a of this section.

   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.28** pound per hour, based on a 3-hour averaging period. This limit is less than the **86.90** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by F.3.a of this section.

   (3) SIP 445.721 *Federally Enforceable SIP Requirement* – The opacity from the exhaust stack of **Fabric Filter (S08)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

   (4) NAC 445B.22017 – The opacity from the exhaust stack of **Fabric Filter (S08)** will not equal or exceed 20% in accordance with NAC 445B.22017.

   (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the stack of **Fabric Filter (S08)** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

F. Emission Units* S2.005 and S2.006 – *Coal Handling Operations, Emergency Coal Pile Reclaim. (continued)

2. NAC 445B.3405
   Emission Limits (Continued)
   b. New Source Performance Standards - Subpart Y - Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.005 and S2.006** will be operated, but not later than 180 days after initial startup, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from **S2.005 and S2.006** the following pollutants in excess of the following specified limits:
      (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
      (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
      (3) At all times, including periods of startup, shutdown, and malfunction, ***the Permittee*** shall, to the extent practicable, maintain and operate **S2.005 and S2.006** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **S2.005 and S2.006** will not exceed **2,000.0** tons of coal per any one-hour period.
   b. **S2.005 and S2.006** may operate 8,760 hours per year.

4. NAC 445B.3405
   a. Monitoring and Recordkeeping
      Upon commencement of operations, ***Permittee will***:
      (1) Monitor and record the weight rate of each batch or charge load of coal to **System 06** on a daily basis.
      (2) Monitor and record the hours of operation of **S2.005 and S2.006** on a daily basis.
      (3) Conduct and record a weekly visible emission inspection on **S2.005 and S2.006** while **System 06** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on the exhaust stack of **Fabric Filter (S08)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

F. Emission Units* S2.005 and S2.006 – *Coal Handling Operations, Emergency Coal Pile Reclaim. (continued)

5. NAC 445B.3405
   a. **NSPS Subpart Y Compliance Requirements – *The Permittee*** shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:

      (1) ***The Permittee*** shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))

      (2) ***The Permittee*** shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))

      (3) ***The Permittee*** shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))

      (4) ***The Permittee*** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 06**. (40 CFR §60.7(b))

      (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))

      (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. ***The Permittee*** shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))

      (7) Except as provided in F.5.a.(8) of this section, ***the Permittee*** shall conduct opacity observations in accordance with F.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of ***the Permittee*** to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))

      (8) ***The Permittee*** may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. ***The Permittee*** shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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Section V. Specific Operating Conditions (continued)

G. Emission Unit* PF1.004 – *Stack-out Conveyor #2 Transfer Point. *UTM: North 4,399.359 km, East 690.671 km (Zone 11)*

System 07	***Stack-out Conveyor #2 Transfer Point***
PF1.004	***Stack-out Conveyor #2 transfer to Active Piles***

1. NAC 445B.3405
   Air Pollution Control Equipment
   Emissions from **PF1.004** shall be controlled by a partial enclosure located at **PF1.004**.

2. NAC 445B.3405
   Emission Limits
   On and after the date of startup of **PF1.004**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from **PF1.004**, the following pollutants in excess of the following specified limits:
   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.004** will not exceed **2.72** pounds per hour, nor more than **2.83** tons per year. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by G.3.a of this section.

   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.004** will not exceed **0.95** pound per hour, nor more than **0.99** ton per year. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by G.3.a of this section.

   (3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from **PF1.004** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

   (4) NAC 445B.22017 – The opacity from **PF1.004** will not equal or exceed 20% in accordance with NAC 445B.22017.

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Section V. Specific Operating Conditions (continued)

G. Emission Units* PF1.004 – *Stack-out Conveyor #2 Transfer Point. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **PF1.004** will not exceed **4,000.0** tons of coal per any one-hour period.
   b. Maximum allowable throughput rate for **PF1.004** will not exceed **8,359,116** tons of coal per 12-month rolling period.
   c. **PF1.004** may operate **8,760** hours per calendar year.
   d. *BACT Requirement* - Emissions from **PF1.004** shall be controlled by a partial enclosure located at **PF1.004**.

4. NAC 445B.3405
   a. Monitoring, Testing and Record keeping
      Upon commencement of operations, ***the Permittee will***:
      (1) Monitor and record the throughput rate of coal to **PF1.004** on a daily basis.
      (2) Monitor and record the hours of operation of **PF1.004** on a daily basis.
      (3) Conduct and record a weekly visible emission inspection on **PF1.004** while **System 07** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

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Section V. Specific Operating Conditions (continued)

H. Emission Units* S2.007 through S2.009 – *Active Pile Reclaim.

UTM: North 4,399.377 km, East 690.572 km (Zone 11)

System 08	***Active Pile Reclaim Operations***
S2.007	***Transfer to Reclaim Hoppers***
S2.008	***Transfer from Hoppers to Active Pile Conveyor***
S2.009	***Transfer from Active Pile Conveyor to Reclaim Conveyor #1***

1. NAC 445B.3405
   Air Pollution Control Equipment
   a. Emissions from **S2.007 through S2.009 each,** shall be ducted to a control system consisting of a **Fabric Filter (S13)** with 100% capture and a maximum volume flow rate of **6,640** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	10.0 ft
Stack Diameter:	1.5 ft
Stack Velocity:	63.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	6,640 dscfm

2. NAC 445B.3405
   Emission Limits
   On and after the date of startup of **S2.007 through S2.009, *the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Fabric Filter (S13)** the following pollutants in excess of the following specified limits:
   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by H.3.a of this section.

   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by H.3.a of this section.

   (3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from the exhaust stack of **Fabric Filter (S13)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

   (4) NAC 445B.22017 – The opacity from the exhaust stack of **Fabric Filter (S13)** will not equal or exceed 20% in accordance with NAC 445B.22017.

   (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the exhaust stack of **Fabric Filter (S13)** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

H. Emission Units* S2.007 through S2.009 – *Active Pile Reclaim. (Continued)

2. NAC 445B.3405
   Emission Limits (Continued)
   b. New Source Performance Standards - Subpart Y - Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.007 through S2.009** will be operated, but not later than 180 days after initial startup, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Fabric Filter (S13)** the following pollutants in excess of the following specified limits:
      (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
      (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
      (3) At all times, including periods of startup, shutdown, and malfunction, ***the Permittee*** shall, to the extent practicable, maintain and operate **S2.007 through S2.009** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **S2.007 through S2.009 each,** will not exceed **4,000.0** tons of coal per any one-hour period.
   b. **S2.007 through S2.009 each,** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Testing and Record keeping
      Upon commencement of operations, ***the Permittee will***:
      (1) Monitor and record the throughput rate of coal to **S2.007 through S2.009** on a daily basis.
      (2) Monitor and record the hours of operation of **S2.007 through S2.009** on a daily basis.
      (3) Conduct and record a weekly visible emission inspection on **S2.007 through S2.009** while **System 08** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on the exhaust stack of **Fabric Filter (S13)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

H. Emission Units* S2.007 through S2.009 – *Active Pile Reclaim. (Continued)

5. NAC 445B.3405
   a. **NSPS Subpart Y Compliance Requirements – *The Permittee*** shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:

   (1) ***The Permittee*** shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))

   (2) ***The Permittee*** shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))

   (3) ***The Permittee*** shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))

   (4) ***The Permittee*** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 08**. (40 CFR §60.7(b))

   (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))

   (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. ***The Permittee*** shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))

   (7) Except as provided in H.5.a.(8) of this section, ***the Permittee*** shall conduct opacity observations in accordance with H.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of ***the Permittee*** to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))

   (8) ***The Permittee*** may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. ***The Permittee*** shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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Section V. Specific Operating Conditions (continued)

I. Emission Units* S2.010 through S2.017 – *Transfer Tower.

UTM: North 4,399.363 km, East 690.959 km (Zone 11)

System 09	***Transfer Tower Operations***
S2.010	***Transfer from Stack-out Conveyor #1 to Transfer Tower***
S2.011	***Transfer from Emergency Reclaim Conveyor to Transfer Tower***
S2.012	***Transfer from Reclaim Conveyor #1A to Transfer Tower***
S2.013	***Transfer from Reclaim Conveyor #1B to Transfer Tower***
S2.014	***Transfer Tower (with Crusher)***
S2.015	***Transfer from Transfer Tower to Stack-out Conveyor #2***
S2.016	***Transfer from Transfer Tower to Reclaim Conveyor #2A***
S2.017	***Transfer from Transfer Tower to Reclaim Conveyor #2B***

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.010 through S2.017 each,** shall be ducted to a control system consisting of a **Fabric Filter (S15)** with 100% capture and a maximum volume flow rate of **6,640** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	140.0 ft
Stack Diameter:	1.5 ft
Stack Velocity:	63.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	6,640 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.010 through S2.017**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Fabric Filter (S15)**, the following pollutants in excess of the following specified limits:

a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period. This limit is less than the **111.5** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by I.3.a of this section.

(2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period. This limit is less than the **111.5** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by I.3.a of this section.

(3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from the exhaust stack of **Fabric Filter (S15)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

(4) NAC 445B.22017 – The opacity from the exhaust stack of **Fabric Filter (S15)** will not equal or exceed 20% in accordance with NAC 445B.22017.

(5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the exhaust stack of **Fabric Filter (S15)** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

I. Emission Units* S2.010 through S2.017 – *Transfer Tower. (Continued)

2. NAC 445B.3405
   Emission Limits (Continued)
   b. New Source Performance Standards - Subpart Y - Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.010 through S2.017 each,** will be operated, but not later than 180 days after initial startup, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Fabric Filter (S15)** the following pollutants in excess of the following specified limits:
      (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
      (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
      (3) At all times, including periods of startup, shutdown, and malfunction, ***the Permittee*** shall, to the extent practicable, maintain and operate **S2.010 through S2.017 each,** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **S2.010 through S2.017 each,** will not exceed **10,000.0** tons of coal per any one-hour period.
   b. **S2.010 through S2.017 each,** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Testing and Record keeping
      Upon commencement of operations, ***Permittee will***:
      (1) Monitor and record the throughput rate of coal to **S2.010 through S2.017 each,** on a daily basis.
      (2) Monitor and record the hours of operation of **S2.010 through S2.017 each,** on a daily basis.
      (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Fabric Filter (S15),** while **System 09** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on the exhaust stack of **Fabric Filter (S15)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

I. Emission Units* S2.010 through S2.017 – *Transfer Tower. (Continued)

5. NAC 445B.3405
   a. **NSPS Subpart Y Compliance Requirements – *The Permittee*** shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:

   (1) ***The Permittee*** shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))

   (2) ***The Permittee*** shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))

   (3) ***The Permittee*** shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))

   (4) ***The Permittee*** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 09**. (40 CFR §60.7(b))

   (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))

   (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. ***The Permittee*** shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))

   (7) Except as provided in I.5.a.(8) of this section, ***the Permittee*** shall conduct opacity observations in accordance with I.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of ***the Permittee*** to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))

   (8) ***The Permittee*** may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. ***The Permittee*** shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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Section V. Specific Operating Conditions (continued)

J. Emission Units* S2.018 through S2.020 – *Tripper Deck.

UTM: North 4,399.423 km, East 690.310 km (Zone 11)

System 10	***Tripper Deck Operations***
S2.018	***Reclaim Conveyor #2A transfer to Tripper Deck Conveyor***
S2.019	***Reclaim Conveyor #2B transfer to Tripper Deck Conveyor***
S2.020	***Transfer to Coal Silos***

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.018 through S2.020 each,** shall be ducted to a control system consisting of a **Fabric Filter (S17)** with 100% capture and a maximum volume flow rate of **33,200** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	285.0 ft
Stack Diameter:	3.0 ft
Stack Velocity:	8.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	33,200 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.018 through S2.020**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Fabric Filter (S17)**, the following pollutants in excess of the following specified limits:

a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **2.85** pounds per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by J.3.a of this section.

(2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **2.85** pounds per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by J.3.a of this section.

(3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from the exhaust stack of **Fabric Filter (S17)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

(4) NAC 445B.22017 – The opacity from the exhaust stack of **Fabric Filter (S17)** will not equal or exceed 20% in accordance with NAC 445B.22017.

(5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the stack of **Fabric Filter (S17)** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

J. Emission Units* S2.018 through S2.020 – *Tripper Deck. (Continued)

2. NAC 445B.3405
   Emission Limits
   b. New Source Performance Standards - Subpart Y - Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.018 through S2.020 each,** will be operated, but not later than 180 days after initial startup, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Fabric Filter (S17)** the following pollutants in excess of the following specified limits:
      (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
      (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
      (3) At all times, including periods of startup, shutdown, and malfunction, ***the Permittee*** shall, to the extent practicable, maintain and operate **S2.018 through S2.020 each,** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **S2.018 through S2.020 each,** will not exceed **4,000.0** tons of coal per any one-hour period.
   b. **S2.018 through S2.020 each,** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Testing and Record keeping
      Upon commencement of operations, ***Permittee will***:
      (1) Monitor and record the throughput rate of coal to **S2.018 through S2.020** on a daily basis.
      (2) Monitor and record the hours of operation of **S2.018 through S2.020** on a daily basis.
      (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Fabric Filter (S17)** while **System 10** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on the exhaust stack of **Fabric Filter (S17)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

Section V. Specific Operating Conditions (continued)

J. Emission Units* S2.018 through S2.020 – *Tripper Deck. (Continued)

5. NAC 445B.3405
   a. **NSPS Subpart Y Compliance Requirements – *The Permittee*** shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:

      (1) ***The Permittee*** shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))

      (2) ***The Permittee*** shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))

      (3) ***The Permittee*** shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))

      (4) ***The Permittee*** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 10**. (40 CFR §60.7(b))

      (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))

      (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. ***The Permittee*** shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))

      (7) Except as provided in J.5.a.(8) of this section, ***the Permittee*** shall conduct opacity observations in accordance with J.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of ***the Permittee*** to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))

      (8) ***The Permittee*** may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. ***The Permittee*** shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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Section V. Specific Operating Conditions (continued)

K. Emission Units* PF1.005 and PF1.006 – *Bottom Ash Handling.

UTM: North 4,399.445 km, East 691.319 km (Zone 11)

System 11	***Bottom Ash Handling and Conveyance Operations***
PF1.005	***Submerged Chain Conveyors transfer to Bottom Ash Conveyors (Transfer #1)***
PF1.006	***Bottom Ash Conveyors transfer to Bottom Ash Bunker***

1. NAC 445B.3405
   Air Pollution Control Equipment
   Emissions from **PF1.005** shall be controlled by material conditioning, and emissions from **PF1.006** shall be controlled by a partial enclosure.

2. NAC 445B.3405
   Emission Limits
   On and after the date of startup of **PF1.005 and PF1.006**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from **PF1.005 and PF1.006**, the following pollutants in excess of the following specified limits:
   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.005** will not exceed **0.012** pound per hour, nor more than **0.014** ton per year. This limit is less than the **42.5** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by K.3.a of this section.
   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.005** will not exceed **0.004** pound per hour, or more than **0.005** ton per year. This limit is less than the **42.5** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by K.3.a of this section.
   (3) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.006** will not exceed **0.012** pound per hour, nor more than **0.014** ton per year. This limit is less than the **42.5** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by K.3.a of this section.
   (4) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.006** will not exceed **0.004** pound per hour, or more than **0.005** ton per year. This limit is less than the **42.5** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by K.3.a of this section.
   (5) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from **PF1.005 and PF1.006 each,** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
   (6) NAC 445B.22017 – The opacity from **PF1.005 and PF1.006 each,** will not equal or exceed 20% in accordance with NAC 445B.22017.

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Section V. Specific Operating Conditions (continued)

K. Emission Units* PF1.005 and PF1.006 – *Bottom Ash Handling. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **PF1.005 and PF1.006 each,** will not exceed **40.0** tons of bottom ash per any one-hour period.
   b. Maximum allowable throughput rate for **PF1.005 and PF1.006 each,** will not exceed **94,610** tons of bottom ash per 12-month rolling period.
   c. **PF1.005 and PF1.006 each,** may operate **8,760** hours per calendar year.
   d. *BACT Requirement* - Emissions from **PF1.005** shall be controlled by material conditioning, and emissions from **PF1.006** shall be controlled by a partial enclosure.

4. NAC 445B.3405
   a. Monitoring, Testing and Record keeping
      Upon commencement of operations, ***Permittee will***:
      (1) Monitor and record the throughput rate of bottom ash to **PF1.005 and PF1.006 each,** on a daily basis.
      (2) Monitor and record the hours of operation of **PF1.005 and PF1.006 each,** on a daily basis.
      (3) Conduct and record a weekly visible emission inspection on **PF1.005 and PF1.006 each,** while **System 11** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

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Section V. Specific Operating Conditions (continued)

L. Emission Units* PF1.007 through PF1.009 – *Bottom Ash Unloading and Truck Transfer.

UTM: North 4,401.105 km, East 692.104 km (Zone 11)

System 12	***Bottom Ash Unloading and Truck Transfer Operations***
PF1.007	***Unloading of Bottom Ash Bunker and Transfer of Bottom Ash to Haul Trucks (Transfer #2)***
PF1.008	***Haul Trucks Transfer of Bottom Ash to On-Site Disposal Facility (Transfer #3)***
PF1.009	***On-Site Disposal Facility – Bottom Ash Handling and Storage Piles***

1. NAC 445B.3405

   Air Pollution Control Equipment

   Emissions from **PF1.007** and **PF1.008** shall be controlled by material conditioning. Emissions from active portions of **PF1.009** shall be controlled by water sprays, and emissions from inactive portions of **PF1.009** shall be controlled by surface sealants (crusting agents).

2. NAC 445B.3405

   Emission Limits

   On and after the date of startup of **PF1.007 through PF1.009**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from **PF1.007 through PF1.009**, the following pollutants in excess of the following specified limits:

   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.007** will not exceed **0.046** pound per hour, nor more than **0.014** ton per year. This limit is less than the **55.44** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by L.3.a of this section.

   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.007** will not exceed **0.016** pound per hour, or more than **0.005** ton per year. This limit is less than the **55.44** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by L.3.a of this section.

   (3) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.008** will not exceed **0.046** pound per hour, nor more than **0.014** ton per year. This limit is less than the **55.44** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by L3.a of this section.

   (4) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.008** will not exceed **0.016** pound per hour, or more than **0.005** ton per year. This limit is less than the **55.44** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by L.3.a of this section.

   (5) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.009** will not exceed **1.36** pounds per hour, nor more than **5.96** tons per year.

   (6) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.009** will not exceed **0.33** pound per hour, or more than **1.44** tons per year.

   (7) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from **PF1.007 through PF1.009 each,** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

   (8) NAC 445B.22017 – The opacity from **PF1.007 through PF1.009 each,** will not equal or exceed 20% in accordance with NAC 445B.22017.

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Section V. Specific Operating Conditions (continued)

L. Emission Units* PF1.007 through PF1.009 – *Bottom Ash Unloading and Truck Transfer. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **PF1.007 through PF1.009 each,** will not exceed **150.0** tons of bottom ash per any one-hour period.
   b. Maximum allowable throughput rate for **PF1.007 through PF1.009 each,** will not exceed **94,610** tons of bottom ash per 12-month rolling period.
   c. **PF1.007 through PF1.009 each,** may operate **8,760** hours per calendar year.
   d. *BACT Requirement* - Emissions from **PF1.007** and **PF1.008** shall be controlled by material conditioning. Emissions from active portions of **PF1.009** shall be controlled by water sprays, and emissions from inactive portions of **PF1.009** shall be controlled by surface sealants (crusting agents).

4. NAC 445B.3405
   a. Monitoring, Testing and Record keeping
      Upon commencement of operations, ***Permittee will***:
      (1) Monitor and record the throughput rate of bottom ash to **PF1.007 through PF1.009 each,** on a daily basis.
      (2) Monitor and record the hours of operation of **PF1.007 through PF1.009 each,** on a daily basis.
      (3) Conduct and record a weekly visible emission inspection on **PF1.007 through PF1.009 each,** while **System 12** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

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Section V. Specific Operating Conditions (continued)

M. Emission Units* S2.021 through S2.023 – *Fly Ash Silos.

UTM: North 4,399.624 km, East 691.264 km (Zone 11)

System 13	***Fly Ash Silos Operations***
S2.021	***Transfer of Fly Ash to Fly Ash Silo #1 (Loading)***
S2.022	***Transfer of Fly Ash to Fly Ash Silo #2 (Loading)***
S2.023	***Transfer of Fly Ash to Fly Ash Silo #3 (Loading)***

1. NAC 445B.3405

   Air Pollution Control Equipment

   Emissions from **S2.021 through S2.023** shall be ducted to a control system consisting of **Fly Ash Bin Vent Filters (S26)** with a 100% capture rate and a maximum volume flow rate of **2,324** dry standard cubic feet per minute (dscfm), each. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	75.0 ft (each)
Stack Diameter:	0.87 ft (each)
Stack Velocity:	65.8 ft/sec (each)
Stack Temperature:	Ambient
Volume Flow Rate:	2,324 dscfm (each)

2. NAC 445B.3405

   Emission Limits

   a. On and after the date of startup of **S2.021 through S2.023**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from each of the exhaust stacks of the **Fly Ash Bin Vent Filters (S26)**, the following pollutants in excess of the following specified limits:

      (1) NAC 445B.305 – The discharge of **PM** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **1.20** pounds per hour, based on a 3-hour averaging period, nor more than **5.23** tons per year. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by M.3.a of this section.

      (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **1.20** pounds per hour, based on a 3-hour averaging period, nor more than **5.23** tons per year. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by M.3.a of this section.

      (3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from each of the **Fly Ash Bin Vent Filters (S26)** stack discharges will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

      (4) NAC 445B.22017 – The opacity from each of the **Fly Ash Bin Vent Filters (S26)** stack discharges will not equal or exceed 20**%** in accordance with NAC 445B.22017.

      (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from each stack of the **Fly Ash Bin Vent Filters (S26)** will not exceed **0.02** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

M. Emission Units* S2.021 through S2.023 – *Fly Ash Silos. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. The maximum allowable throughput rate for **S2.021 through S2.023 each,** will not exceed **200.0** tons of Fly Ash per any one-hour period.
   b. The maximum allowable annual throughput for **S2.021 through S2.023 each,** will not exceed **576,951** tons of Fly Ash per calendar year.
   c. **S2.021 through S2.023 each,** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Recordkeeping and Compliance
      Permittee will:
      (1) Monitor and record the amount of Fly Ash loaded into **S2.027 through S2.029** each day loading occurs.
      (2) Conduct a weekly inspection of each of the **Fly Ash Bin Vent Filters (S26)** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the bags and housing) and any corrective actions taken.
      (3) Conduct and record a visible emission inspection once per month on the each of the **Fly Ash Bin Vent Filters (S26)**; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on each of the exhaust stacks of **Fly Ash Bin Fabric Filters (S26)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

Na. Emission Units* S2.024 through S2.027 – *Fly Ash Mixing Station.

UTM: North 4,399.637 km, East 691.221 km (Zone 11)

System 14a	***Fly Ash Mixing Station Operations (Loading)***
S2.024	***Fly Ash Silo #1 discharge to Fly Ash Mixing Station (Loading)***
S2.025	***Fly Ash Silo #2 discharge to Fly Ash Mixing Station (Loading)***
S2.026	***Fly Ash Silo #3 discharge to Fly Ash Mixing Station (Loading)***
S2.027	***Fly Ash Mixing Station (Mixing)***

1. NAC 445B.3405

   Air Pollution Control Equipment

   Emissions from **S2.024 through S2.027** shall be ducted to a control system consisting of a **Fabric Filter (S27)** with a 100% capture rate and a maximum volume flow rate of **6,640** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	35.0 ft
Stack Diameter:	1.5 ft
Stack Velocity:	63.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	6,640 dscfm

2. NAC 445B.3405

   Emission Limits

   a. On and after the date of startup of **S2.024 through S2.027, *the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of the **Fabric Filter (S27)**, the following pollutants in excess of the following specified limits:

      (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by Na.3.a of this section.

      (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by Na.3.a of this section.

      (3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from the **Fabric Filter (S27)** stack discharge will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

      (4) NAC 445B.22017 – The opacity from the **Fabric Filter (S27)** stack discharge will not equal or exceed 20**%** in accordance with NAC 445B.22017.

      (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the stack of the **Fabric Filter (S27)** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

Na. Emission Units* S2.024 through S2.027 – *Fly Ash Mixing Station. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. The maximum allowable loading rate for **S2.024 through S2.027 each,** will not exceed **200.0** tons of Fly Ash per any one-hour period.
   b. **S2.024 through S2.027 each,** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Recordkeeping and Compliance
      Permittee will:
      (1) Monitor and record the amount of Fly Ash loaded into **S2.024 through S2.027** each day loading occurs.
      (2) Conduct a weekly inspection of the **Fabric Filter (S27)** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the bags and housing) and any corrective actions taken.
      (3) Conduct and record a visible emission inspection once per month on the exhaust stack of **Fabric Filter (S27)**; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on the exhaust stack of **Fabric Filter (S27)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

Nb. Emission Units* S2.027b – *Railcar or Truck Loading Operations (Optional).

UTM: North 4,399.637 km, East 691.221 km (Zone 11)

System 14b Railcar or Truck Loading Operations (Optional)
S2.027b Fly Ash Silos Discharge to Railcar or Truck

1. NAC 445B.3405
   Air Pollution Control Equipment
   Emissions from **S2.027b** shall be ducted to a control system consisting of a **Fabric Filter (S27b)** with a 100% capture rate and a maximum volume flow rate of **6,640** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A. Alternatively, the volumetric flow rate may be determined from the known exhaust stack diameter and the flow velocity determined via Method 5 in 40 CFR Part 60, Appendix A.

Stack Height:	35.0 ft
Stack Diameter:	1.5 ft
Stack Velocity:	63.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	6,640 dscfm

2. NAC 445B.3405
   Emission Limits
   a. Within 60 days after achieving the maximum production rate at which **S2.027b** will be operated, but not later than 180 days after initial startup of **S2.027b, *the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of the **Fabric Filter (S27b)**, the following pollutants in excess of the following specified limits:
      (1) NAC 445B.305 – The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by Nb.3.a of this section.
      (2) NAC 445B.305 – The discharge of PM (particulate matter) to the atmosphere will not exceed **0.57** pound per hour, based on a 3-hour averaging period. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by Nb.3.a of this section.
      (3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from the **Fabric Filter (S27b)** stack discharge will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
      (4) NAC 445B.22017 – The opacity from the **Fabric Filter (S27b)** stack discharge will not equal or exceed 20**%** in accordance with NAC 445B.22017.
      (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the stack of the **Fabric Filter (S27b)** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

Na. Emission Unit* S2.027b *– Railcar or Truck Loading Operations (Optional). (continued)

3. NAC 445B.3405
   Operating Parameters
   a. The maximum allowable discharge rate for **S2.027b** will not exceed **200.0** tons of Fly Ash per any one-hour period.
   b. **S2.027b** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Recordkeeping and Compliance
      The Permittee will:
      (1) Conduct a weekly inspection of the **Fabric Filter (S27b)** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the bags and housing) and any corrective actions taken.
      (2) Conduct and record a visible emission inspection once per month on the exhaust stack of **Fabric Filter (S27b)**; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (3) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on the exhaust stack of **Fabric Filter (S27b)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

O. Emission Units* PF1.010 and PF1.011 – *Fly Ash Handling and Conveyance.

UTM: North 4,399.641 km, East 692.047 km (Zone 11)

System 15	***Fly Ash Handling and Conveyance Operations***
PF1.010	***Fly Ash Mixing Station discharge to Haul Trucks (Transfer #1)***
PF1.011	***Haul Trucks transfer to On-Site Disposal Facility (Transfer #2)***

1. NAC 445B.3405
   Air Pollution Equipment
   Emissions from **PF1.010 and PF1.011 each,** shall be controlled by material conditioning.

2. NAC 445B.3405
   Emission Limits
   On and after the date of startup of **PF1.010 and PF1.011**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.010 and PF1.011**, the following pollutants in excess of the following specified limits:
   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.010** will not exceed **0.049** pound per hour, or exceed **0.07** ton per year. This limit is less than the **62.4** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by O.3.a of this section.
   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.010** will not exceed **0.017** pound per hour, or exceed **0.025** ton per year. This limit is less than the **62.4** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by O.3.a of this section.
   (3) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere from **PF1.011** will not exceed **0.049** pound per hour, or exceed **0.07** ton per year. This limit is less than the **62.4** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by O.3.a of this section.
   (4) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.011** will not exceed **0.017** pound per hour, or exceed **0.025** ton per year. This limit is less than the **62.4** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by O.3.a of this section.
   (5) SIP 445.721 *Federally Enforceable SIP Requirement* – The opacity from **PF1.010 and PF1.011 each,** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
   (6) NAC 445B.22017 – The opacity from **PF1.010 and PF1.011 each,** will not equal or exceed 20% in accordance with NAC 445B.22017.

Section V. Specific Operating Conditions (continued)

O. Emission Units* PF1.010 and PF1.011 – *Fly Ash Handling and Conveyance. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **PF1.010 and PF1.011 each,** will not exceed **285.0** tons of Fly Ash per any one-hour period.
   b. Maximum allowable annual throughput rate for **PF1.010 and PF1.011 each,** will not exceed **822,567** tons of Fly Ash per 12-month rolling period.
   c. **PF1.010 and PF1.011 each,** may operate 8,760 hours per year.
   d. *BACT Requirement* - Emissions from **PF1.010 and PF1.011 each,** shall be controlled by material conditioning.

4. NAC 445B.3405
   a. Monitoring, Testing and Record keeping
      Upon commencement of operations, ***Permittee will***:
      (1) Monitor and record the throughput rate of fly ash to **PF1.010 and PF1.011 each,** on a daily basis.
      (2) Monitor and record the hours of operation of **PF1.010 and PF1.011 each,** on a daily basis.
      (3) Conduct and record a weekly visible emission inspection on **PF1.010 and PF1.011 each,** while **System 15** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

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Section V. Specific Operating Conditions (continued)

P. Emission Units* S2.028 – *Carbon Silo.

UTM: North 4,399.425 km, East 691.140 km (Zone 11)

System 16	***Carbon Silo Operations***
S2.028	***Carbon Silo Loading***

1. NAC 445B.3405
   Air Pollution Control Equipment
   Emissions from **S2.028** shall be ducted to a control system consisting of a **Bin Vent Filter (S33)** with a 100% capture rate and a maximum volume flow rate of **3,486** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	35.0 ft
Stack Diameter:	1.0 ft
Stack Velocity:	74.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	3,486 dscfm

2. NAC 445B.3405
   Emission Limits
   On and after the date of startup of **S2.028, *the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of the **Bin Vent Filter (S33)**, the following pollutants in excess of the following specified limits:
   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.60** pound per hour, based on a 3-hour averaging period. This limit is less than the **77.6** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by P.3.a of this section.
   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.60** pound per hour, based on a 3-hour averaging period. This limit is less than the **77.6** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by P.3.a of this section.
   (3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from the **Bin Vent Filter (S33)** stack discharge will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
   (4) NAC 445B.22017 – The opacity from the **Bin Vent Filter (S33)** stack discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.
   (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the stack discharge of the **Bin Vent Filter (S33)** will not exceed **0.02** grain per dry standard cubic foot, based on a 3-hour averaging period.

Section V. Specific Operating Conditions (continued)

P. Emission Units* S2.028 – *Carbon Silo. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. The maximum allowable loading rate for **S2.028** will not exceed **1,000.0** tons of Halogenated Activated Carbon per any one-hour period.
   b. **S2.028** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Recordkeeping and Compliance
      Permittee will:
      (1) Monitor and record the amount of Halogenated Activated Carbon loaded into **S2.028** each day loading occurs.
      (2) Conduct a weekly inspection of the **Bin Vent Filter (S33)** on **S2.028** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the bags and housing) and any corrective actions taken.
      (3) Conduct and record a visible emission inspection once per month on the exhaust stack of **Bin Vent Filter (S33)**; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on the exhaust stack of **Bin Vent Filter (S33)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

Q. Emission Units* S2.029 through S2.031 – *Lime Railcar Unloading Station.

UTM: North 4,399.465 km, East 690.926 km (Zone 11)

System 17	***Lime Railcar Unloading Station Operations***
S2.029	***Lime Railcar Unloading to Load-Out Hopper***
S2.030	***Lime Load-Out Hopper transfer to Lime Short Conveyor***
S2.031	***Lime Short Conveyor transfer to Lime Conveyor***

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **S2.029 through S2.031 each,** shall be ducted to a control system consisting of a **Fabric Filter (S35)** with 100% capture and a maximum volume flow rate of **42,200** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	35.0 ft
Stack Diameter:	4.0 ft
Stack Velocity:	56.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	42,200 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.029 through S2.031**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Fabric Filter (S35)** the following pollutants in excess of the following specified limits:

a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **3.62** pounds per hour, based on a 3-hour averaging period. This limit is less than the **77.6** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by Q.3.a of this section.

(2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **3.62** pounds per hour, based on a 3-hour averaging period. This limit is less than the **77.6** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by Q.3.a of this section.

(3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from the exhaust stack of **Fabric Filter (S35)** will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.

(4) NAC 445B.22017 – The opacity from the exhaust stack of **Fabric Filter (S35)** will not equal or exceed 20% in accordance with NAC 445B.22017.

(5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the exhaust stack of **Fabric Filter (S35)** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

Q. Emission Units* S2.029 through S2.031 – *Lime Railcar Unloading Station. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. Maximum allowable throughput rate for **S2.029 through S2.031 each,** will not exceed **1,000.0** tons of lime per any one-hour period.
   b. **S2.029 through S2.031 each,** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Testing and Record keeping
      Upon commencement of operations, ***Permittee will***:
      (1) Monitor and record the throughput rate of lime to **S2.029 through S2.031 each,** on a daily basis.
      (2) Monitor and record the hours of operation of **S2.029 through S2.031 each,** on a daily basis.
      (3) Conduct a weekly inspection of the **Fabric Filter (S35)** on **S2.029 through S2.031 each,** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the bags and housing) and any corrective actions taken.
      (4) Conduct and record a weekly visible emission inspection on the exhaust stack of **Fabric Filter (S35)** while **System 17** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (5) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on the exhaust stack of **Fabric Filter (S35)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

R. Emission Unit S2.032 – Lime Silo Operations.

UTM: North 4,399.449 km, East 691.137 km (Zone 11)

System 18	***Lime Silo Operations***
S2.032	***Lime Silo Loading (from either Lime Conveyor or from Truck Delivery via pneumatic transfer)***

1. NAC 445B.3405
   Air Pollution Control Equipment
   Emissions from **S2.032** shall be ducted to a control system consisting of a **Bin Vent Filter (S37)** with 100% capture and a maximum volume flow rate of **6,972** dry standard cubic feet per minute (dscfm), each. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height:	60.0 ft
Stack Diameter:	1.5 ft
Stack Velocity:	66.0 ft/sec
Stack Temperature:	Ambient
Volume Flow Rate:	6,972 dscfm

2. NAC 445B.3405
   Emission Limits
   On and after the date of startup of **S2.032**, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from the three exhaust stack of the **Bin Vent Filter (S37)**, the following pollutants in excess of the following specified limits:
   a. (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **1.20** pounds per hour, based on a 3-hour averaging period. This limit is less than the **77.6** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by R.3.a of this section.
   (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **1.20** pounds per hour, based on a 3-hour averaging period. This limit is less than the **77.6** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by R.3.a of this section.
   (3) SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from the **Bin Vent Filter (S37)** stack discharge will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
   (4) NAC 445B.22017 – The opacity from the **Bin Vent Filter (S37)** stack discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.
   (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere from the stack discharge of the **Bin Vent Filter (S37)** will not exceed **0.02** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

R. Emission Unit* S2.032 – *Lime Silo Operations. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. The maximum allowable loading rate for **S2.032** will not exceed **1,000.0** tons of Lime per any one-hour period.
   b. **S2.032** may operate **8,760** hours per calendar year.

4. NAC 445B.3405
   a. Monitoring, Recordkeeping and Compliance
      Permittee will:
      (1) Monitor and record the amount of Lime loaded into **S2.032** each day loading occurs.
      (2) Monitor and record the hours of operation of **S2.032** on a daily basis.
      (3) Conduct a weekly inspection of the **Bin Vent Filter (S37)** on **S2.032** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the bags and housing) and any corrective actions taken.
      (4) Conduct and record a weekly visible emission inspection on the exhaust stack of **Bin Vent Filter (S37)** while **System 18** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
      (5) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM_{10} on each of the exhaust stack of **Bin Vent Filter (S37)** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

S. Emission Unit* S2.033 – *Emergency Diesel Engine Driven Generator *UTM: North 4,399.439 km, East 691.239 km (Zone 11)*

System 19	***Emergency Diesel Engine Driven Generator***
S2.033	***Emergency Diesel Engine Driven Generator, 2,000 Brake Horsepower***

1. NAC 445B.3405
   Air Pollution Control Equipment
   Emissions from **S2.033** shall be controlled via combustion controls, proper maintenance, and the use of low-sulfur fuel.

2. NAC 445B.3405
   Emission Limits
   a. On and after the date of startup of **S2.033**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.033**, the following pollutants in excess of the following specified limits:
      (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.66** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.17** ton per year, based on a rolling 12-month averaging period.
      (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.66** pound per hour. The discharge of **PM_{10}** to the atmosphere will not exceed **0.17** ton per year, based on a rolling 12-month averaging period.
      (3) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere will not exceed **0.04** pound per million Btu, based on a rolling 3-hour averaging period.
      (4) NAC 445B.305 – The discharge of **SO_2** (sulfur dioxide) to the atmosphere will not exceed **0.024** pound per hour. The discharge of **SO_2** to the atmosphere will not exceed **0.006** ton per year, based on a rolling 12-month averaging period.
      (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **SO_2** to the atmosphere will not exceed **1.6×10^{-3}** pound per million Btu, based on a rolling 3-hour averaging period.
      (6) NAC 445B.305 – The discharge of **NO_x** (nitrogen oxides) to the atmosphere will not exceed **21.0** pounds per hour. The discharge of **NO_x** to the atmosphere will not exceed **5.29** tons per year, based on a rolling 12-month averaging period.
      (7) NAC 445B.305 *BACT Emission Limit* – The discharge of **NO_x** to the atmosphere will not exceed **1.37** pounds per million Btu, based on a rolling 3-hour averaging period.
      (8) NAC 445B.305 – The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **11.66** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **2.89** tons per year, based on a rolling 12-month averaging period.
      (9) NAC 445B.305 *BACT Emission Limit* – The discharge of **CO** to the atmosphere will not exceed **0.75** pound per million Btu, based on a rolling 3-hour averaging period.
      (10) NAC 445B.305 – The discharge of **VOC** (volatile organic compounds) to the atmosphere will not exceed **1.55** pounds per hour. The discharge of **VOC** to the atmosphere will not exceed **0.39** ton per year, based on a rolling 12-month averaging period.
      (11) NAC 445B.305 *BACT Emission Limit* – The discharge of **VOC** to the atmosphere will not exceed **0.10** pound per million Btu, based on a rolling 3-hour averaging period.
      (12) NAC 445B.305 – The discharge of **sulfuric acid mist** to the atmosphere will not exceed **9.3×10^{-4}** pound per hour. The discharge of **sulfuric acid mist** to the atmosphere will not exceed **2.3×10^{-4}** ton per year, based on a rolling 12-month averaging period.
      (13) NAC 445B.305 *BACT Emission Limit* – The discharge of **sulfuric acid mist** to the atmosphere will not exceed **6.0×10^{-5}** pound per million Btu, based on a rolling 3-hour averaging period.
      (14) SIP 445.721 *Federally Enforceable SIP* – The opacity from the **S2.033** stack discharge will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
      (15) NAC 445B.22017 – The opacity from the **S2.033** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.

Section V. Specific Operating Conditions (continued)

S. Emission Unit S2.033 – Emergency Diesel Engine Driven Generator. (continued)

2. NAC 445B.3405

Emission Limits (Continued)

b. New Source Performance Standards

(1) 40 CFR § 60.4205(b) *Federally Enforceable New Source Performance Standard Requirement* – Owners and operators of 2007 model year or later emergency stationary compression ignition (CI) internal combustion engine (ICE) with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new, non-road CI engines in 40 CFR § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(i) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new, non-road CI engines for the same model year and maximum engine power in 40 CFR § 89.112 and 40 CFR § 89.113, for all pollutants beginning in model year 2007 apply. (40 CFR § 60.4202(a)(2))

(ii) Exhaust emissions from non-road engines to which this subpart is applicable shall not exceed the applicable exhaust emission standards as follows:
For engines with a rated power of greater than 560 kW, the following emission standards (in g/kW-hr) apply:
(A) Non-methane hydrocarbon (**NMHC**) + Oxides of Nitrogen (**NO_x**), combined, shall not exceed **6.4** g/kW-hr;
(B) Carbon Monoxide (**CO**) shall not exceed **3.5** g/kW-hr;
(C) Particulate Matter (**PM**) shall not exceed **0.20** g/kW-hr).
(40 CFR § 89.112(a))

(iii) Exhaust opacity from compression ignition, non-road engines, for which this subpart is applicable, must not exceed:
(A) **20** percent during the acceleration mode;
(B) **15** percent during the lugging mode; and
(C) **50** percent during the peaks in either the acceleration or lugging modes.
As measured and calculated per 40 CFR Part 86, Subpart I. (40 CFR §89.113(a) and (b))

(2) 40 CFR § 60.4207(a) *Federally Enforceable New Source Performance Standard Requirement* – Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(a).

(i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
(A) Sulfur content – 500 parts per million (ppm) maximum. (40 CFR § 80.510(a)(1))
(B) Cetane index or aromatic content – minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(a)(2))

(3) 40 CFR § 60.4207(b) *Federally Enforceable New Source Performance Standard Requirement* – Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for non-road diesel fuel.

(i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
(A) Sulfur content – 15 (ppm) maximum. (40 CFR § 80.510(b)(1))
(B) Cetane index or aromatic content – minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(b)(2))

Facility ID No. A0586 *PERMIT NO.* AP4911-1502
CLASS I AIR QUALITY
OPERATING PERMIT TO CONSTRUCT

Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

S. Emission Unit* S2.033 – *Emergency Diesel Engine Driven Generator. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. **S2.033** may only combust distillate fuel with a sulfur content not to exceed **0.0015%** sulfur, by weight.
   b. **S2.033** may not combust more than **112.0** gallons of distillate fuel per hour.
   c. **S2.033** may not operate on a routine basis in excess of **500** hours per calendar year. If additional firing is required in case of emergency, ***the Permittee*** will document the emergency and handle the operation as excess emissions as required by Section III.B.4.

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

S. Emission Unit* S2.033 – *Emergency Diesel Engine Driven Generator. (continued)

4. NAC 445B.3405

Monitoring, Record keeping and Compliance

a. Upon commencement of operation, ***the Permittee*** will:

(1) Monitor and record the total daily hours of operation of **S2.033** each day of operation.

(2) Monitor and record the total daily fuel consumption for **S2.033** each day of operation.

(3) Record average hourly fuel consumption for **S2.033** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in S.4.a.(1) and S.4.a.(2) of this section.

(4) Conduct and record a Method 9 visible emissions test on the stack discharge of **S2.033** while the Diesel Engine Driven Generator is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

(5) 40 CFR § 60.4211(c) *Federally Enforceable New Source Performance Standard Requirement* – ***The Permittee*** shall comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in S.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.

(6) 40 CFR § 60.4209(a) *Federally Enforceable New Source Performance Standard Requirement* – As an owner or operator of an emergency stationary CI ICE, you must install a non-resettable hour meter prior to startup of the engine.

(7) 40 CFR § 60.4211(e) *Federally Enforceable New Source Performance Standard Requirement* – Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.

(8) 40 CFR § 60.4214(b) *Federally Enforceable New Source Performance Standard Requirement* – ***The Permittee*** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR § 60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, ***the Permittee*** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. ***The Permittee*** must record the time of operation of the engine and the reason the engine was in operation during that time.

(9) 40 CFR § 63.6590(b) *Federally Enforceable National Emission Standards for Hazardous Air Pollutants Requirement* ***The Permittee*** does not have to meet the requirements of this subpart and of subpart A of 40 CFR Part 63 except for the initial notification requirements of 40 CFR § 63.6645(d).

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Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

T. Emission Unit* S2.034 – *Emergency Diesel Engine Driven Firewater Pump *UTM: North 4,399.539 km, East 691.092 km (Zone 11)*

System 20	***Emergency Diesel Engine Driven Firewater Pump***
S2.034	***Emergency Diesel Engine Driven Firewater Pump, 450 Brake Horsepower***

1. NAC 445B.3405
   Air Pollution Control Equipment
   Emissions from **S2.034** shall be controlled via combustion controls, proper maintenance, and the use of low-sulfur fuel.

2. NAC 445B.3405
   Emission Limits
   a. On and after the date of startup of **S2.034**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.034**, the following pollutants in excess of the following specified limits:
      (1) NAC 445B.305 – The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.15** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.011** ton per year, based on a rolling 12-month averaging period.
      (2) NAC 445B.305 – The discharge of **PM_{10}** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.015** pound per hour. The discharge of **PM_{10}** to the atmosphere will not exceed **0.011** ton per year, based on a rolling 12-month averaging period.
      (3) NAC 445B.305 *BACT Emission Limit* – The discharge of **PM_{10}** to the atmosphere will not exceed **0.05** pound per million Btu, based on a 3-hour rolling period.
      (4) NAC 445B.305 – The discharge of **SO_2** (sulfur dioxide) to the atmosphere will not exceed **0.005** pound per hour. The discharge of **SO_2** to the atmosphere will not exceed **0.0004** ton per year, based on a rolling 12-month averaging period.
      (5) NAC 445B.305 *BACT Emission Limit* – The discharge of **SO_2** to the atmosphere will not exceed **1.6×10^{-3}** pound per million Btu, based on a 3-hour rolling period.
      (6) NAC 445B.305 – The discharge of **NO_x** (nitrogen oxides) to the atmosphere will not exceed **2.97** pounds per hour. The discharge of **NO_x** to the atmosphere will not exceed **0.22** ton per year, based on a rolling 12-month averaging period.
      (7) NAC 445B.305 *BACT Emission Limit* – The discharge of **NO_x** to the atmosphere will not exceed **0.94** pound per million Btu, based on a 3-hour rolling period.
      (8) NAC 445B.305 – The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **2.57** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **0.19** ton per year, based on a rolling 12-month averaging period.
      (9) NAC 445B.305 *BACT Emission Limit* – The discharge of **CO** to the atmosphere will not exceed **0.82** pound per million Btu, based on a 3-hour rolling period.
      (10) NAC 445B.305 – The discharge of **VOC** (volatile organic compounds) to the atmosphere will not exceed **1.10** pounds per hour. The discharge of **VOC** to the atmosphere will not exceed **0.083** ton per year, based on a rolling 12-month averaging period.
      (11) NAC 445B.305 *BACT Emission Limit* – The discharge of **VOC** to the atmosphere will not exceed **0.35** pound per million Btu, based on a 3-hour rolling period.
      (12) NAC 445B.305 – The discharge of **sulfuric acid mist** to the atmosphere will not exceed **1.9×10^{-4}** pound per hour. The discharge of **sulfuric acid mist** to the atmosphere will not exceed **1.4×10^{-5}** ton per year, based on a rolling 12-month averaging period.
      (13) NAC 445B.305 *BACT Emission Limit* – The discharge of **sulfuric acid mist** to the atmosphere will not exceed **6.0×10^{-5}** pound per million Btu, based on a 3-hour rolling period.
      (14) SIP 445.721 *Federally Enforceable SIP* – The opacity from the **S2.034** stack discharge will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one hour in accordance with SIP 445.721.
      (15) NAC 445B.22017 – The opacity from the **S2.034** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.

Section V. Specific Operating Conditions (continued)

T. Emission Unit S2.034 – Emergency Diesel Engine Driven Firewater Pump. (continued)

2. NAC 445B.3405

Emission Limits (Continued)

b. New Source Performance Standards

(1) 40 CFR § 60.4205(c) *Federally Enforceable New Source Performance Standard Requirement* – Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in Table 4 of 40 CFR Part 60, Subpart IIII. The following emission standards (in g/kw-hr) apply

(i) For engines with a maximum engine power of greater than 225 kW, but less than 450 kW, the following emission standards (in g/kW-hr) apply:

(A) Non-methane hydrocarbon (**NMHC**) + Oxides of Nitrogen ($\mathbf{NO_x}$), combined, shall not exceed **3.0** g/kW-hr;

(B) Carbon Monoxide (**CO**) shall not exceed **2.6** g/kW-hr;

(C) Particulate Matter (**PM**) shall not exceed **0.15** g/kW-hr).

(2) 40 CFR § 60.4207(a) *Federally Enforceable New Source Performance Standard Requirement* – Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:

(A) Sulfur content – 500 parts per million (ppm) maximum. (40 CFR 80.510(a)(1))

(B) Cetane index or aromatic content – minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(a)(2))

(3) 40 CFR § 60.4207(b) *Federally Enforceable New Source Performance Standard Requirement* – Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for non-road diesel fuel.

(i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:

(A) Sulfur content – 15 (ppm) maximum. (40 CFR 80.510(b)(1))

(B) Cetane index or aromatic content – minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(b)(2))

Section V. Specific Operating Conditions (continued)

T. Emission Unit* S2.034 – *Emergency Diesel Engine Driven Firewater Pump. (continued)

3. NAC 445B.3405
   Operating Parameters
   a. **S2.034** may only combust distillate fuel with a sulfur content not to exceed **0.0015%** sulfur, by weight.
   b. **S2.034** may not combust more than **23.0** gallons of distillate fuel per hour.
   c. **S2.034** may not operate on a routine basis in excess of **150** hours per calendar year. If additional firing is required for emergency fire protection, ***the Permittee*** will document the emergency and handle the operation as excess emissions as required by Section III.B.4.

Section V. Specific Operating Conditions (continued)

T. Emission Unit* S2.034 – *Emergency Diesel Engine Driven Firewater Pump. (Continued)

4. NAC 445B.3405

Monitoring, Record keeping and Compliance

a. Upon commencement of operation, ***the Permittee*** will:

(1) Monitor and record the total daily hours of operation of **S2.034** each day of operation.

(2) Monitor and record the total daily fuel consumption for **S2.034** each day of operation.

(3) Record average hourly fuel consumption for **S2.034** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in T.4.a.(1) and T.4.a.(2) of this section.

(4) Conduct and record a Method 9 visible emissions test on the stack discharges of **S2.034** while the Emergency Diesel Engine Driven Firewater Pump is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

(5) 40 CFR §60.4211(c) *Federally Enforceable New Source Performance Standard Requirement* – ***The Permittee*** must comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in T.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.

(6) 40 CFR §60.4209(a) *Federally Enforceable New Source Performance Standard Requirement* – As an owner or operator of an emergency stationary CI ICE, ***the Permittee*** must install a non-resettable hour meter prior to startup of the engine.

(7) 40 CFR §60.4211(e) *Federally Enforceable New Source Performance Standard Requirement* – Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.

(8) 40 CFR §4214(b) *Federally Enforceable New Source Performance Standard Requirement* – ***The Permittee*** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR §60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, ***the Permittee*** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. ***The Permittee*** must record the time of operation of the engine and the reason the engine was in operation during that time.

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

U. Emission Unit* S2.035 – *Fuel Storage Tank *UTM: North 4,399.474 km, East 691.094 km (Zone 11)*

System 21	***Distillate Fuel Storage Tank***
S2.035	***330,000 Gallon Distillate Fuel Storage Tank***

1. NAC 445B.3405
   Air Pollution Control Equipment
   S2.035 shall be controlled by a fixed roof and conservation vent valve(s).

   S2.035 Tank Dimensions
   Tank Height: 40.0 ft
   Tank Diameter: 39.0 ft

2. NAC 445B.3405
   Emission Limits
   On and after the date of startup of ***S2.035***, ***the Permittee*** will not discharge or cause the discharge into the atmosphere from ***S2.035***, the following pollutants in excess of the following specified limits:
   a. NAC 445B.305 The discharge of **VOC** to the atmosphere will not exceed **126.9** pounds per rolling 12-month averaging period.
   b. NAC 445B.305 *BACT Emission Limit* – The discharge of **VOC** to the atmosphere will not exceed **126.9** pounds per rolling 12-month averaging period.
   c. SIP 445.721 *(Federally Enforceable SIP Requirement)* – The opacity from **S2.035** will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any one-hour period.
   d. NAC 445B.22017 – The opacity from **S2.035** will not equal or exceed **20%**. The opacity must be determined as set forth in 445B.22017.1(a) or (b).

3. NAC 445B.3405
   Operating Parameters
   a. **S2.035** may store distillate fuel only.
   b. The maximum throughput will not exceed: **4,950,000** gallons per rolling 12-month period.
   c. **S2.035** may operate **8,760** hours per year.

4. NAC 445B.3405
   a. Monitoring, Record keeping and Compliance
      Upon commencement of operations, ***the Permittee*** will monitor and record in a contemporaneous log, the total distillate fuel throughput for **S2.035** on a monthly basis and calculate the rolling 12-month total.

**************End of Specific Operating Conditions***************

Nevada Department of Conservation and Natural Resources • Division of Environmental Protection
BUREAU OF AIR POLLUTION CONTROL
901 SOUTH STEWART STREET SUITE 4001
CARSON CITY, NEVADA 89701-5249
p: 775-687-9350 • www.ndep.nv.gov/bapc • f: 775-687-6396

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CLASS I AIR QUALITY
OPERATING PERMIT TO CONSTRUCT

Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section VI. Emission Caps

A. No Emission Caps Defined.

**************End of Emission Caps***************

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Section VII. Surface Area Disturbance Conditions

A. NAC 445B.22037
Fugitive Dust
1. ***The Permittee*** may not cause or permit the handling, transporting, or storing of any material in a manner that allows or may allow controllable particulate matter to become airborne.
2. Except as otherwise provided in subsection 4, ***the Permittee*** may not cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and re-vegetation.
3. Except as provided in subsection 4, ***the Permittee*** may not disturb or cover 5 acres or more of land or its topsoil until ***the Permittee*** has obtained an Operating Permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.
4. The provisions of subsections 2 and 3 do not apply to:
   a. Agricultural activities occurring on agricultural land; or
   b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.

B. NAC 445B.305 *Federally Enforceable PSD Permit BACT Requirement*
Fugitive Dust Air Pollution Control Equipment
1. ***The Permittee*** shall install and continuously operate and maintain the following air pollution controls:
   a. Facility Roads - With the exception of roads at the solid waste disposal facility, all facility roads shall be paved and controlled with water sprays and/or sweeping. Roads at the solid waste disposal facility shall be controlled with gravel and/or chemical suppressants.
   b. Active Coal Storage Piles - All active coal storage piles shall be controlled with water sprays.
   c. Inactive Coal Storage Piles - All inactive coal storage piles shall be controlled by surface sealants (crusting agents).
   d. Emergency Coal Storage Pile - The emergency coal storage pile shall be controlled by water sprays.
   e. Solid Waste Disposal Facility - Inactive areas of the on-site solid waste disposal facility shall be controlled by surface sealants (crusting agents). Active areas of the on-site solid waste disposal facility shall be controlled by water sprays.

**************End of Surface Area Disturbance Conditions ***************

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: WHITE PINE ENERGY ASSOCIATES, LLC, as Permittee

Section VIII. Amendments

NA

This Permit to construct:

1. **Is non-transferable. (NAC 445B.287)**
2. **Will be posted conspicuously at or near the stationary source. (NAC 445B.318)**
3. **Will expire if construction is not commenced within 18 months after the date of issuance or if construction of the facility is delayed for 18 months after initiated. (NAC 445B.3366)**
4. **Will expire if a complete application for a Class I operating permit or modification of an existing Class I operating permit is not submitted within 12 months after the initial start-up. (NAC 445B.3366)**
5. **Any party aggrieved by the Department's decision to issue this permit may appeal to:**
   a) **The State Environmental Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340)**
   b) **The United States Environmental Protection Agency's Environmental Appeals Board (EAB). The provisions in 40 CFR 124.19 shall apply to appeals made to the EAB for this PSD Operating Permit to Construct.**
6. ***The Permittee* shall submit a complete Class I application within 12 months after the notification date of commencement of operation as required in this permit to construct. (NAC 445B.3361)**
7. **The effective date of the permit is 30 days after service of notice to the applicant and commenters of the final decision to issue, modify, or revoke and reissue the permit, unless review is requested on the permit under 40 CFR 124.19 within the 30 day period.**
8. **If an appeal is made to the EAB, the effective date of the permit is suspended until such time as the appeal is resolved.**

Signature _____

Issued by: Michael Elges
Bureau Chief
Bureau of Air Pollution Control

Phone: (775) 687-9349 Date: **PROPOSED**

Class I Non-Permit Equipment List

Appended to White Pine Energy Associates, LLC, #AP4911-1502

Emission Unit #	Emission Unit Description
IA1.001	20,000 Gallon Distillate Fuel Storage Tank, NAC 445B.288(2)(d)
IA1.002	2,000 Gallon Distillate Fuel Storage Tank, NAC 445B.288(2)(d)
IA1.003	500 Gallon Distillate Fuel Storage Tank, NAC 445B.288(2)(d)
IA1.004	500 Gallon Unleaded Gasoline Storage Tank, NAC 445B.288(2)(d)
IA1.005	Safety Kleen (or equivalent) parts cleaner (non-halogenated, cold solvent); Approved Pursuant to NAC 445B.288(4), March 01, 1996, Insignificant Activity List